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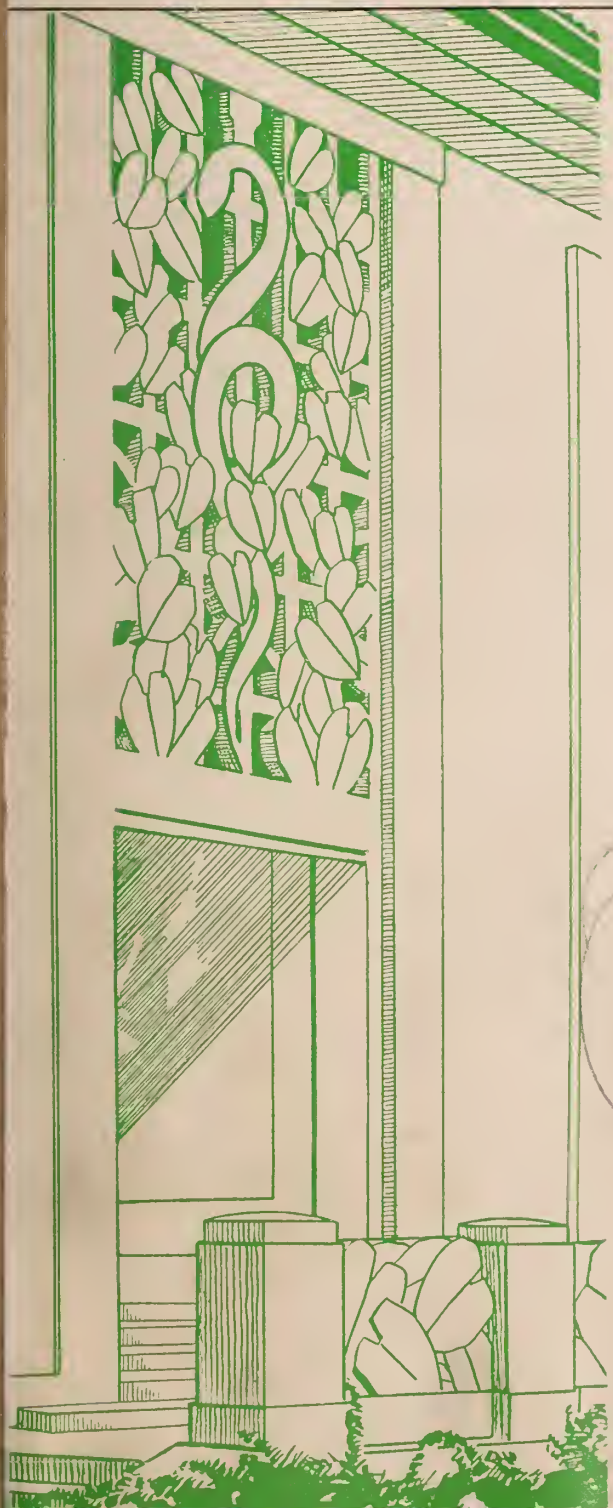
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GENERAL PRINCIPLES OF PHARMACOLOGY

CHAUNCEY D. LEAKE, Ph.D.

AVERSION TREATMENT OF ALCOHOLISM

WILLIAM M. SHANAHAN, M.D.
AND
EDWARD J. HORNICK, M.D.

ARE OPTICAL COMPANIES' REBATES ILLEGAL?

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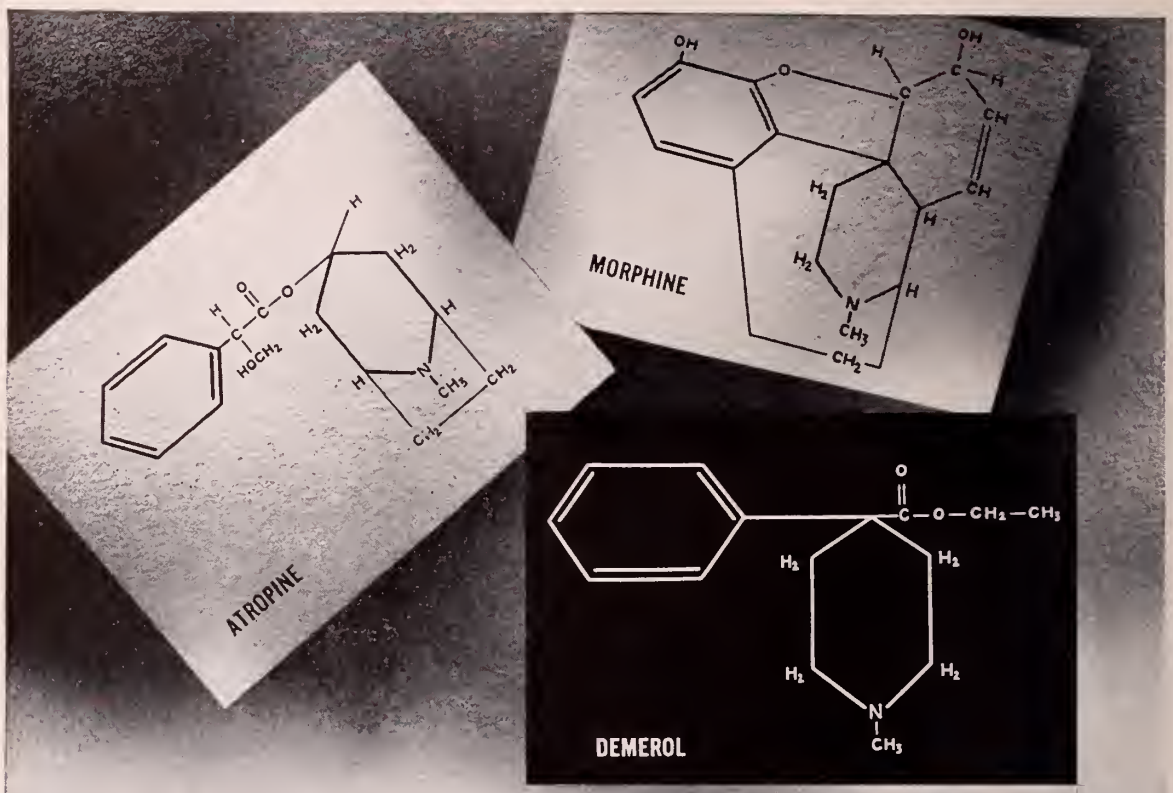
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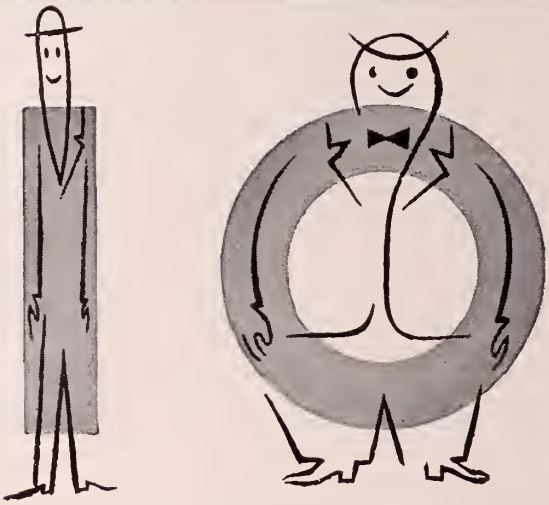
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GENERAL PRINCIPLES OF PHARMACOLOGY

CHAUNCEY D. LEAKE, Ph.D.*

PHARMACOLOGY is the study of the action of chemicals on living things. The action may be beneficial or harmful and the living things may be plant or animal. Pharmacology is thus a broad scientific discipline. Its scientific applications are chiefly applied in medicine. However, other applications are rapidly developing in agriculture, industrial hygiene, law, and even in sociology. Pharmacology is closely related to other scientific disciplines such as biochemistry, biophysics, physiology, bacteriology, pathology, and pharmaceutical chemistry.

Pharmacology began anciently with the observation of the action of crude plant, animal and mineral materials when tried for food. Primitive and isolated peoples all over the world developed an elaborate folk lore regarding the application of such observations to disease. Most of these applications were sensible. Thus the Modoc Indians in northern California observed that the eating of the bark of a certain tree produces purgation. They then rationally used this bark when constipated. It was in this way that cascara sagrada was introduced into general medicine. The ancient Egyptians had elaborate text-books and recipe books, which described the use of various preparations in various clinical conditions. These recipes were copied and elaborated by the Greeks and Romans, frequently combined into complex prescriptions by the Arabian and medieval physicians, and finally were subjected to increasingly careful analysis beginning with the rise of modern chemistry.

Modern pharmacology began in the eighteenth century with Lavoisier's establishment of chemistry on a quantitative basis. Crude drugs such as opium were analysed for their active principles. Sertuerner in Germany isolated a sleep-producing crystalline material from opium which he called morphine, with reference to the Graeco-Roman god of sleep. This was followed by other isolations of alkaloids, and later of other types of active principles including those found in vitamins, hormones, and even in biological preparations for immunology.

Not satisfied with active chemical agents found in nature, pharmacologists began to try to improve upon them, in order to increase the desired effect, and reduce toxicity. It is necessary first to identify the active principle chemically. Often this is an arduous job. But it has been successfully accomplished, even with such complex compounds as the alkaloids and steroids. Now by slight chemical modification, it is possible to synthesize a considerable series of related compounds, in order to choose the one that is best suited for the particular purpose in mind.

The main criteria for the choice of a drug for a particular purpose are low toxicity, desired activity, prompt effect, easily controlled effect; no untoward reactions, even on frequently repeated administration; and ease of administration and manufacture.

DRUG STANDARDIZATION

But first it is necessary that drugs be standardized. This was recognized as long ago as the sixteenth century. Valerius Cordus (1515-1544) prepared a formulary for the use of the druggists of the city of Nuremberg. This was adopted by the Senate of the city as the standard, to be followed by all druggists. This became then the first official pharmacopoeia. Physicians were now assured that the drugs they used would be always the same, with unvarying characteristics. They could thus expect reasonable uniformity of effect from the same dosage of such a standard preparation.

When the active principles of crude drugs were isolated in chemically pure form, a great advance was possible in standardization, since now the crystalline material could be made to conform to specific chemical standards. A more precise relationship between dosage and effect thus became possible.

The American Medical Association at the beginning of the twentieth century established the Council on Pharmacy and Chemistry. This is composed of a group of experts who serve without remuneration. This Council examines into the claims of all new drugs. It publishes annually *New and Non-Official Remedies*. To be included in *New and Non-Official Remedies* a drug must meet certain minimum standards regarding identification, definiteness of action, and restriction to reasonable claims, based on available evidence.

Physicians would find it very helpful to give increasing attention to the *United States Pharmacopoeia* and to *New and Non-Official Remedies*.

* From the University of Texas Medical Branch. Presented before a Post-Graduate Session of the Honolulu County Medical Society, May 6, 1946.

The *United States Pharmacopoeia* was first established in 1820 by a general convention of physicians, druggists, and other interested public officials. The Pharmacopoeia Convention meets every ten years and delegates are accepted from state and other medical societies. The pharmacopoeia guarantees, by legal support, that drugs offered under the name indicated in the pharmacopoeia must conform to the standards established in the pharmacopoeia.

The use of public names is important to the physician. It means much saving in money. A chemical agent sold under a "trade name" may cost ten times as much as the same chemical agent sold under a public name. It is important for physicians to know the public names of proprietary drugs, and to use such drugs under public names. When physicians do a lot of dispensing it is particularly important that they follow the drug names as listed in the pharmacopoeia, and when using combinations of drugs to follow the formulae in the National Formulary.

When new drugs are developed for medical use, there is a systematic way of appraising their value. This should begin with an exhaustive study of toxicity on single and repeated dose. All phases of possible toxic action should be analysed and described for the benefit of the physician. There should then be offered full information on rates and ways of absorption into the body. What happens to the drug in the body should be studied and described. The doctors should be informed regarding the rate of detoxification and the rate and mode of excretion. General and special pharmacological properties should be described in detail. This information should be offered in comparison with related and commonly used chemicals offered for the same purpose. The physician is then in a reasonable position to judge for himself what may be the best drug, in a series of related compounds, for the particular purpose he has in mind. It is this sort of evidence that the doctor should insist upon receiving from commercial pharmaceutical concerns. He should be offered more information regarding what a drug does and how it acts than what clinical conditions to use it in. The doctor's judgment should tell him what to use a drug for. It is not the function of commercial pharmaceutical concerns to tell a doctor how to practice medicine. It is their responsibility, however, to give the physician full scientific information regarding the drug they are interested in promoting.

When a drug has been thoroughly studied in a scientific manner, it may be ready for controlled clinical evaluation. In this it is essential to take into account the natural history of the particular disease condition in which it is proposed to study the drug. The physician must estimate the healing power of nature in respect to the particular disease with which he is dealing. He must also beware of the logical fallacy of confusing sequence of events with cause and effect. If there is sound clinical evidence to support the scientific background of the drug, there may be justification for its inclusion in *New and Non-Official Remedies* and its being offered to physicians for general clinical use. But doctors should insist always upon having this information and they should then appraise for themselves the evidence regarding the drug.

FACTORS MODIFYING DRUG ACTION

The chief factors modifying drug action are dosage, the ratio of the rate of absorption of the drug through the body to the rate of its destruction or excretion, the physical-chemical properties of the drug, and the individual peculiarities of the particular patient to whom the drug is given.

By dosage is meant mass of chemical per mass of body tissue excluding fat. This suggests the importance of dosage on a "milligrams per kilogram" basis. Many of the newer drugs are being introduced for use in this manner. Drugs with a more general and less toxic action may be given by "average dose," but for precise drug use it is wise to work out dosage in terms of milligrams per kilogram.

The mode of administration profoundly modifies dose effects. This is because the mode of administration is important in the rate of absorption of the drug. It is practically helpful for the physician to study techniques of medication in order to obtain the most satisfactory results with patients. Absorption is slowest, of course, through the skin. It is next most rapid through the mucous membranes of the alimentary tract. It is important to remember the rectum as an absorbing area when it may be difficult to get satisfactory administration by mouth. Absorption of gaseous agents across the respiratory mucous membrane is very rapid. The method offering the next most rapid absorption is intramuscular injection. Parenteral administration, of course, requires aseptic precautions. Subcutaneous injection is a not particularly satisfactory method of administering drugs, but it is widely used. The most rapid absorption is obtained when the drug is given by vein. Sometimes a drug may be given into the spinal canal for particular local effects there. It is important to remember that drugs may be absorbed from the mucous membranes of the vaginal tract, the ear,

or the eye. Sometimes a drug given only for local effect at the point of application may be absorbed and produce a systemic reaction.

It is important to know something about the rate of drug destruction or excretion. This gives the clue to the important problem of how frequently to repeat its administration. Many drugs, such as penicillin or the sulfonamides, are rapidly excreted in the urine, and require frequent administration in order to maintain the concentration necessary for effectiveness. Many drugs are detoxified by combining with amino acids in the body. When this is possible, allergic effects may occur from the drug. All drugs which have a ring structure chemically, with amino groups or phenolic hydroxyl groups, may combine with amino acids and thus give rise to allergic responses in sensitized tissue. Drugs such as aspirin, amidopyrine, the sulfa compounds, local anesthetics, and aniline derivatives may combine readily with amino acids and produce allergic effects. A physician cannot tell which patient may show the allergic reaction, or where; but he should be prepared to expect such reactions in at least five percent of patients given such drugs.

Strenuous efforts are being made to delay the excretion of penicillin or to decrease the rate of absorption, so as to prolong the effective concentration. When we know more about the chemical makeup of penicillin we may be able to devise chemical relatives which will be more slowly excreted and so give a more lasting effect.

The physical chemical properties of drugs are important with respect to their action in the body. If the drug is more soluble in oily material than in water, it will tend to concentrate in the oily parts of the body. Those of greatest functional importance are the elements of the nervous system. Thus most drugs acting on the nervous system have a high oil-water solubility coefficient. The redox potentials of drugs are important in respect to their reaction with enzyme systems in cells. These are matters which will become increasingly significant as we learn more about them, and physicians should be prepared to acquire this new knowledge as it develops.

Most important from the physician's standpoint is the estimation of the peculiarities of his individual patient with respect to drug reaction. Age, sex, metabolic state, constitutional factors, and allergic tendencies must be appraised. Careful clinical judgment is required of the physician to appraise those individual factors in his particular patient which may influence drug action. In general, the high metabolic rate of infants diminishes quickly to rise gradually to adolescence and to maintain a plateau until the fourth or fifth decade when there is gradual decline. The estimation of metabolic activity is a difficult clinical problem but it is important in connection with the activity of many different types of drugs. Some drugs, such as morphine, do not follow ordinary rules regarding age effects. Infants and old people in general are more sensitive than those in the prime of life. It is particularly important to appraise the autonomic nervous balance. Some individuals may be peculiarly sensitive to sympathetic drugs, while others may show a higher sensitivity with respect to drugs acting on the parasympathetic system. Most important is the proposition of appraising allergic tendencies in a patient. This should always be investigated in order to avoid if possible allergic or other untoward reactions to drugs which may produce such undesired effects.

DOSE-EFFECT RELATIONSHIPS

Physicians must remember that different individuals will respond differently to the same dose of the same drug. This factor of individual variation in response to drugs can roughly be represented by "distribution curves" in which increasing intensity of reaction to the same dose is indicated along the horizontal axis, while the vertical axis shows the number of individuals grouped with regard to the same intensity of reaction. In general there will be some individuals who will show a relatively small response while the great majority will show the "average effect" and there will be a small number of persons who may show a particularly intense reaction from a dose that might produce no effect in the less sensitive person. When results are accumulated, the resulting curve is sigmoid and shows the percentage of individuals reacting, when arranged on the vertical axis, to increasing dosage on the horizontal axis. Such curves are particularly important in the quantitative estimation of toxicity and effectiveness.

Because of its ease of estimation under experimental conditions, the 50% point on the curve is usually taken as the standard of reference. Thus, ED_{50} refers to the 50% effective dose; that is the dosage which will be effective, in the intensity desired, or 50% of the organisms to which the drug is administered. In the same way LD_{50} refers to the dosage at which 50% of the organisms to which the drug is administered may be expected to die. The ratio between the ED_{50} and the LD_{50} of a drug under standardized experimental conditions is sometimes referred to as the "safety index." It is important for the physician to remember, however, that he is not interested in the dosage which will produce the desired effect in

only 50% of his patients, and he is certainly not interested in the dosage which may *kill* 50% of his patients. The point is that the effective dose range of a drug may overlap the lethal range or the range of toxic reaction. This is the case, for example, with such drugs as emetine. It is practically important for physicians to require pharmaceutical manufacturing houses to give precise information on the ED_{99} with relation to the LD_1, that is the ratio between the dosage which might be expected to produce the desired effect in practically all patients, to the dosage that might produce an untoward reaction in the most sensitive patient.

TIME-CONCENTRATION RELATIONSHIPS

Time is an important factor in the biological response to drugs. For certain drugs, such as the inhalation anesthetics, the effective concentration for anesthesia, if maintained long enough, might produce untoward or even lethal effects. Accordingly it is necessary to have data expressed in time-concentration curves. This may assist materially in estimating absorption and excretion gradients in relation to time and concentration for many important types of drugs. One wishes, of course, to obtain a concentration which within a reasonable time will produce the desired effect, but which—even if maintained for a relatively long period of time—will not produce undesired effects.

These matters of time-concentration and dose-effect relations are exhaustively studied in a theoretical manner by A. J. Clark, and have been placed on a firm practical basis.

MECHANISMS OF DRUG ACTION

While the dose-effect relationship with regard to drugs was anciently implied as a scientific problem for pharmacology, the question of the mechanism by which drugs act was not raised in a scientific manner until the nineteenth century. Greek, Roman, and medieval physicians developed elaborate theories of drug action with reference to the balance of "humors." Crude and easily observable physical properties of drugs, together with easily recognizable effects, were "fitted" into the humoral theory as well as possible. Drugs were assessed from the standpoint of their cooling, heating, astringent, caustic, purgative, or other properties, and used generally in an effort to obtain an idealized balance of humors. A significant reaction against the severe abuse of drug therapy during the eighteenth century resulted in the effort under C. F. S. Hahnemann (1755-1843) to develop "homeopathy," in which ridiculously small doses of drugs were recommended. This effort did, however, remind physicians effectively of the healing power of nature, and indirectly assisted in a more systematic study of the mechanism of drug action.

With the development of modern chemistry, following the pioneering quantitative studies of A. L. Lavoisier (1743-1794), and the isolation and identification of the active principles of crude drug in crystalline pure form, it was possible for the first time to begin a quantitative study of drug action, with particular reference to mechanism. Francois Magendie (1783-1855), whose biography has been so delightfully written by Professor J. M. Olmsted (Schuman, New York, 1945), first undertook the study of the localization of the site of action of drugs. In this he was assisted by his remarkable English pupil, James Blake (1815-1893). He began the study of factors determining the concentration of drugs in particular tissues, as a result of a survey of factors concerned in absorption, and in destruction or excretion. The action of drugs was studied with reference to the point of application, not only with regard to precipitation of protein, but also with respect to possible reflex nerve responses. Studies were later made on the effects of drugs in transport through the body. This led to the first satisfactory scientific explanation of drug action, in the work of Claude Bernard (1813-1878) on the action of carbon monoxide in displacing oxygen from hemoglobin, and thus producing all the effects of oxygen want.

More recent studies on the mechanism of drug action have been directed toward the basic units concerned, which are molecules of drugs in relation to cells of the living body. This has been well explored by A. J. Clark (1885-1941) and his English followers. Clark called particular attention to the relatively small size of the molecules of a drug in comparison to the relatively large size of the cells on which they act. He pointed out that the very large number of molecules of a drug, even in a small mass, would compensate for the difference in size.

Most of the current theories regarding the mechanism of drug action involve surface phenomena. These concern surface tension, polarity, template effects, blocking effects, "active patches," and a competitive effect involving essential metabolites.

In order to understand current theories of the mechanism of drug action, it is essential to know something about the surface organization of cells. According to the admirable summary by Davson and Danielli, the cell surface is composed of a double layer of oriented lipoid molecules, with single flattened molecules of protein spread on the outside and inside. These protein molecules may

have reactive chemical groupings exposed to the surface, to which various compounds in the intercellular fluid, including drugs, may attach. On the other hand certain ions may pass between the protein molecules, get into the lipoid layer, and eventually into the inside of the cell. Other compounds in the intercellular fluid may disrupt the proteins on the surface, dissolve the fats in the lipoid layer, and thus profoundly alter the surface tension with resulting injury or rupture of the cell. Certain molecules attaching to the surface of the cell may block other essential molecules from reacting with the cell in ordinary metabolism, thus altering the activity and reactivity of the cell. It is now known that many drugs act by interfering with essential metabolites, particularly vitamins, through competition involving similarity of chemical structure. It is also now well established that many drugs act by interference with enzyme systems either on the surface of cells or inside cells.

An important point for physicians always to remember in respect to drug action is that drugs can only make cells do more or less what they are already capable of doing. No drug, for example, can make a muscle cell secrete urine. No drug can restore the functional activity of a cell so damaged as to be incapable of that function.

BIOCHEMORPHOLOGY: THE RELATION BETWEEN CHEMICAL CONSTITUTION AND BIOLOGICAL ACTION

It is becoming increasingly important in a practical way for physicians to understand something about the relationship between chemical constitution and biological action of drugs. This fascinating subject was first investigated by that remarkable gold rush doctor, James Blake (1815-1893), who came to the United States after a short, brilliant scientific career in London. About a hundred years ago he settled in St. Louis, joining later the gold rush to California. After a remarkable clinical and scientific career in California, which included meteorology, archeology, geology, and zoology, he returned to his earlier scientific investigations on the relationship between chemical constitution and biological action, with particular reference to inorganic salts. Long before Mendeljeff, Blake had classified the elements into groups on the basis of the biological action of their salt. These groups, of course, correspond to what we now call the "Periodic Table."

It is interesting to learn what similarity of action exists between the various members of the aliphatic organic compounds. Similarly, a common pharmacological property of most alkaloids is rapidity of absorption and distribution and rapidity of destruction or excretion. On the other hand all steroids, including Vitamin D's, sex hormones, digitalis, and carcinogenic agents, are slow in action but the action lasts for a very long time even from a very small dosage.

As we learn more about energy distribution and potentiality, we will be able more satisfactorily to predict the possible biological action of new chemical compounds. Indeed, some advance in this respect has already been made.

CLASSIFICATION OF DRUGS

The most satisfactory classification of drugs for the practical work of the physician is on the basis of the chief use of the drug. There are four major divisions into which drugs may be grouped on this basis: First, those drugs used chiefly for diagnosis, such as the halogenated phenolphthaleins; second, those drugs used chiefly for the prevention of disease, such as the vitamins and the antiseptics; third, those drugs used chiefly for "cure," such as quinine in malaria; and fourth, those drugs used chiefly for the alleviation of the symptoms of disease.

By far the greatest number of drugs used in medicine are employed for the alleviation of the symptoms of disease. These may be sub-divided into the systems of the body upon which the chief effect may be expected. Thus one could treat of the drugs which act chiefly upon the central nervous system, either as depressants or stimulants, those which act on the autonomic nervous system and its various divisions in either a stimulating or depressing way, those which act chiefly on the heart and circulation, those which are used chiefly for effects on respiration, those which are employed chiefly in connection with the gastro-enteric tract, those which are used chiefly for an effect on the excretory system, those which are used largely for a reaction on the endocrine system, and those used chiefly for local effects on the skin.

It is important to remember that chemicals used for diagnostic purposes may have significant toxicity, and thus become important from the standpoint of consideration as drugs. Similarly, it is important to remember that some of the vitamins used for the prevention of disease, may under certain conditions have undesired effects and should also be considered from the standpoint of their general pharmacology. Drugs that are used for curative purposes are chiefly involved in the general field called "chemotherapy." This is an in-

creasingly significant research problem and has yielded important practical results.

SUMMARY

Pharmacology has been shown to be a broad scientific discipline involving chiefly chemistry and biology. It may be applied in many ways in addition to medicine. The techniques of standardization and appraisal of drugs are now carefully developed. Great advance has been made in knowledge of the factors which modify drug action. Important theoretical developments have arisen in pharmacology with respect to dose-effect relationships, time-concentration relationships and in regard to the mechanism of drug action.

It is important for physicians to keep abreast of the theoretical basis of the leading pre-clinical sciences. Pharmacology is one of the most rapidly advancing scientific fields, and deserves the careful attention of the alert and progressive modern physician.

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AVERSION TREATMENT OF ALCOHOLISM

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IN AUGUST 1945 we were consulted by a thirty-five year old, married, part Hawaiian man concerning his desire to stop drinking. He had started over eighteen years ago and had been intoxicated a part of each day since, except for three periods of a few days each. Of the 50,000,000 users of alcohol in the United States and the approximate 3,000,000 excessive drinkers, 750,000 are, like this man, chronic alcoholics.[1] In 1943 $1,427,647,000[2] was paid in liquor taxes. Less easily estimated are the family and social morbidity, the mental disorders, bodily diseases, accidents, crime and wage loss incident to alcoholism. Some authorities regard alcoholism as our most important unsolved public health problem.

Our Hawaiian patient currently has a nagging wife, is having trouble living with in-laws, and has an inadequate social life. He is an infantile person who comes from an illustrious family to which he has never measured up. In other cases likewise we usually find current and past social, emotional and character problems. Alcoholism is therefore best conceived of as a secondary or symptomatic disorder. In many persons the habit is so entrenched as to persist even though the original and current contributory factors are alleviated or even absent. The sick alcoholic often is the last person to recognize his affliction and often persistently refuses treatment other than that designed to put him in good physical shape and enable him to sleep at night. He usually can be positively identified by the fact that regardless of intent he is unable to take alcohol in moderation —a few drinks are always followed by more. The use of alcohol for other than social purposes, solitary drinking, and taking a few to "sober up" the morning after are also ominous occurrences.

Voegtlin and Lemere[3] in 1942 exhaustively reviewed all methods of treating alcohol addiction. They found punishment and enforced hospitalization useless. Prohibition reduces the amount of alcohol consumed but does not reduce the incidence of alcoholism. Psychosocial and religious approaches, prolonged institutionalization, outpatient psychotherapy, psychoanalysis, hypnosis, the elevation of blood sugar, spinal drainage, insulin and metrazol shock, benzedrine, vitamin therapy, atropine, strychnine, emetine, apomorphine, rossium, sustained narcosis, lubrokol, colloidal gold, prefrontal lobotomy, oxygen, intravenous alcohol, purgatives, sodium rhodanate, thyroid and a number of other reported curative substances and measures were studied. They concluded that most of these therapies were of little or no curative value. In the best of hands some of them could yield 20 to 35% cures. Few workers seemed to realize the basic fact that complete abstinence is the only acceptable therapeutic goal in alcohol addiction.

Although a great deal might be achieved eventually by education, legislation, social evolution and other preventive measures, we are confronted with our Hawaiian patient and 750,000 or more like him now. Since 1935 a group of physicians in Seattle headed by Voegtlin[4] have been developing the conditioned-reflex treatment as a partial answer to this problem. This depends fundamentally on the creation of an aversion or distaste for alcoholic beverages by virtue of their association during treatment with drugs—emetine, pilocarpine and ephedrine—which make the patient sick. The repeated association of these two stimuli, —alcohol and drugs—under appropriate circumstances, will result finally in the ability of the conditioned stimulus (liquor) to produce the symptom complex formerly brought about by the unconditional stimulus (drugs).

Over 1500[5] patients have received this treatment to date with results which have not been even approached by any other known method.

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Read before the fifty-sixth annual meeting of the Hawaii Territorial Medical Association, May 3, 1946.

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[4] Lemere[5]. Shadel[6]. Voegtlin[7].

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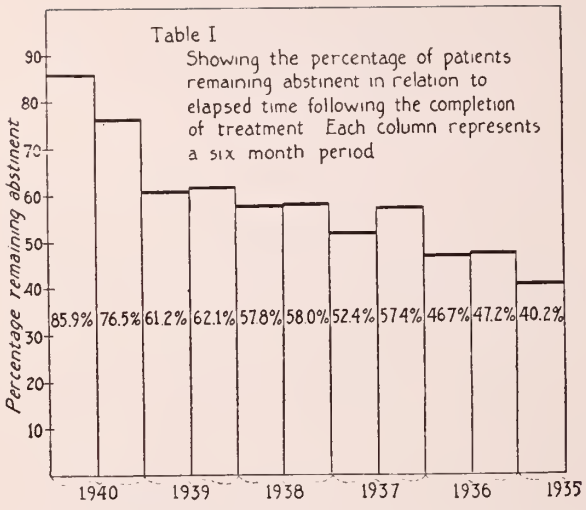


Table 1[9] graphically presents the facts. Better results can be expected when patients are carefully selected. The financially indigent, the uncooperative, the inadequate, the psychotic and the deteriorated have a poor prognosis, as do females, professional men — especially doctors — business executives, bankers, musicians and artists.[10] The desire of the patient to get well, and his normality when not drinking, are prognostically important. Since the treatment is rather strenuous, only those in reasonably good physical condition are accepted. One treatment is given daily for from four to ten days; some of the later ones can often be on an out-patient basis. The procedure is carried out in a special treatment room from which all stimuli are excluded except the sight and smell of all liquors to which the patient has been or might be exposed.

The patient is told that via treatment a condition will result, such that the sight, smell or taste of liquor will make him sick. He is given a glass of salt solution masking one grain of emetine to irritate his gastric mucosa. He is given by hypo about one grain of emetine hydrochloride and four-tenths grain each of ephedrine and pilocarpine. The emetine is given to lower his vomiting threshold by central action; the pilocarpine to produce diaphoresis; and the ephedrine for support. Numerous important technical aspects of the therapy are omitted here for the sake of brevity.

Sitting at a table before a bar, the subject, for a period of five to ten minutes, opens bottles, smells the contents, tastes some and finally at the moment when the therapist is sure a small additional irritant will produce vomiting, the patient drinks his favorites freely. Timing is all-important. The patient then becomes quite nauseated and vomits. Alcohol is immediately administered again and again with similar response each time. At the time of the last treatment the basic facts in Chart 2 are discussed with the patient and he is given a copy of this to take home. In our cases we have first gotten the patient without tremor, and able to eat and sleep without sedation. Complete social and psychiatric histories are secured and relatives, employers and others are utilized in alleviating obvious situational factors. Psychotherapy is conducted as circumstances indicate and permit. An attempt at monthly follow-up is made.

"Abstinence Would Be as Easy for Me as Temperance Would Be Difficult"

1. **Never Take That First Drink** — Experience should have taught you that sooner or later it will lead to more than you intend.
2. **Do Not Experiment With Drinking** — There is no middle road for you. You must make the choice now and forever between total abstinence or eventual drunkenness. It is the impulse to experiment that often leads to that first drink.
3. **Remember That Alcoholism is An Illness**—Although most of your friends can drink or let it alone, you are so constituted that alcohol reacts in the wrong way. This sensitiveness to alcohol is inborn and you will always have it.
4. **Do Not Look on Alcoholism as a Personal Weakness**—Being sensitive to alcohol, you should no more think of drinking than a diabetic would think of eating sugar or a person allergic to strawberries or seafood would think of eating these things.
5. **Do Not Think of Alcohol as a Challenge** — Accept your limitation with grace. We all have some things we cannot do. If you keep trying to prove that you can drink moderately, you are only being bull-headed and hurting yourself and your family for something that is not worth it.
6. **Prove That You Do Not Need Alcohol** — Mastery over alcohol means complete independence of alcohol and not the mere ability to take a few drinks and then stop. The latter ambition is not possible for you to attain and is not worth trying for.
7. **Develop Other Outlets** — Most alcoholics have few hobbies, except drinking. Drinking is often an attempt to escape the boredom and restlessness that beset all of us at times. Most people escape monotony by reading, social activity, working around the house, sports, hunting, fishing, golf, boating, living in the country, music, handicraft, collecting, photography, writing or trips.
8. **Do Not Work Too Hard**—Many alcoholics work long hours and never take a vacation. Avoid nervousness, restlessness and monotony by frequent short trips and getting a change and plenty of rest. Do not put all your eggs in one basket. No job is worth more than your health and happiness.
9. **Develop An Adequate Philosophy of Life**—Get your strength for living from a desire to help yourself and others and not from the bottle. Help other alcoholics master their problem. If you can, develop some sort of a personal religion that will make you realize that your life does not belong to yourself alone to squander for your own pleasure.
10. **Be Proud of Having Stopped Drinking**—You should be so proud of having stopped drinking that you will want to tell your friends. If they are true friends they will admire you for your courage and good sense in having taken the "cure."

Never forget the lessons of the past. Alcohol has been a false friend. Bitter experience has taught you these lessons and you should treasure what you have learned because it has cost you so much.

Taken from Quarterly Journal of Studies on Alcohol, Sept., 1944.

Our Hawaiian patient received six treatments,

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has altered his pattern of life, visited us monthly and now, nine months later, has not taken a drop of alcohol. We have, to date, treated twenty-four individuals with the conditioned reflex method. There were only four females in the group and two Orientals, indicative of the fact that alcoholism is not frequent in either group. Four of the patients did not complete the series but three of these are abstinent. At present 17 or 70% of those treated are abstinent. Four or 17% have slipped but are much better than before treatment. Three or 13% are unimproved. One of these is a man who is probably the most advanced chronic alcoholic in the territory. His runner-up for this dubious honor, also treated, is abstinent after six months.

Complications consisted in several cases of mild emetine poisoning, drug induced irritative cystitis and localized inflammation and myositis from emetine.

CONCLUSIONS

1. Alcoholism is one of our greatest public health and social problems.

2. Alcohol addiction is an illness requiring treatment, the goal of which must be permanent total abstinence.

3. The conditioned-reflex treatment of selected cases in good hands produces results in from 40 to 80% of cases.

4. Twenty-four cases treated by the authors are reported. Insufficient time has passed to permit any final conclusions but up to now, nine months to a few weeks after treatment, 70% of these patients are abstinent, 17% are improved and 13% unimproved.

5. The conditioned-reflex treatment is not a general panacea for alcoholism since the great majority of those afflicted fail to recognize the true nature of their disorder and decline definitive therapy.

An Analysis of the Queen's Hospital Diabetic Clinic

I. THE PHYSICIAN'S DATA

MORTON E. BERK, M.D., LILLIAN ELSHOLTZ PAGE, M.S., AND VIRGINIA C. OTT HERBST, M.S.
HONOLULU

THE incidence of diabetes mellitus has been increasing rapidly. As the human life span is prolonged, the number of diabetics will continue to increase due to the high incidence of diabetes in the older age groups.

Diabetes mellitus is one of the chronic diseases for which there is rational therapy. It is therefore possible to retain most diabetics as assets in the community. Improperly treated, diabetes can produce complications that range from temporary incapacitation to permanent crippling and death, thus providing liabilities for the community.

The Queen's Hospital Diabetic Clinic was started in May, 1940. The purposes of the clinic were: (1) to cut down as far as possible the number of diabetic hospital admissions, (2) to help the private physicians in town who wanted more detailed instructions and more follow-up on their diabetics than they were able to give due to the increased number of patients per individual physician, and (3) to provide a means of caring for the indigent diabetics for whom there were only limited facilities in the community.

It is usually much easier to teach diabetics in groups than alone. The facilities of the hospital clinic include a staff physician and medical resident to supervise the clinic; a trained dietitian to arrange diets; a social service worker to attend to the multitudinous social aspects affecting diabetic patients; and a volunteer worker to assist with the charts, get out reports on patients and numerous other duties.

When possible, student nurses attend the clinic and periodically prepare food demonstrations and teach patients how to do urinalyses and how to administer insulin. They also sit at the round table conferences with patients, thus gaining an insight into all the problems affecting diabetics.

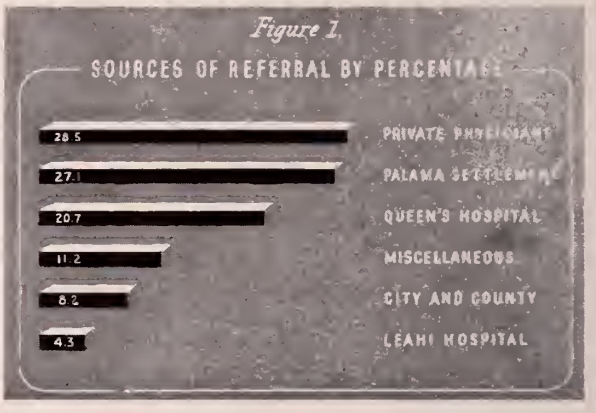
For the sake of conformity to a set routine, it was considered advisable to let the clinic be responsible for the diabetic supervision and keep the referring source advised of the patients' progress. Should the patient have hypertension, hemorrhoids, headaches or any other malady, the physician or clinic referring the patient was to carry out the treatment of that ailment.

Two hundred and thirty-two patients were seen in the diabetic clinic during the first five years. If the clinic has justified its existence, a resume of its records should prove of value. The following are the items we thought both important and interesting.

Read before the fifty-sixth annual meeting of the Hawaii Territorial Medical Association, May 3, 1946.

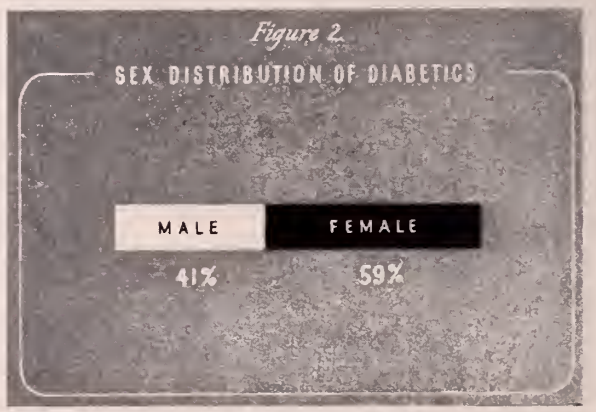
ANALYSIS OF DATA

Sources of Referral.—More patients were referred to the diabetic clinic by private physicians than from any other single source (Fig. 1). Palama



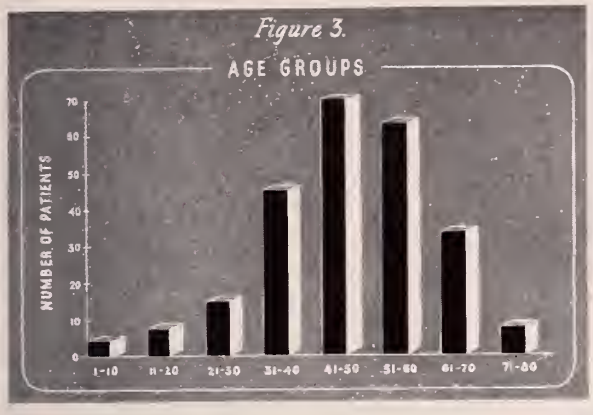
Settlement, a clinic for medical indigents, was second, with The Queen's Hospital, Miscellaneous, City and County service and Leahi Hospital for Tuberculosis following in that order.

Sex Distribution.—Of the 232 patients, 59 per cent were female; 41 per cent were male (Fig. 2).

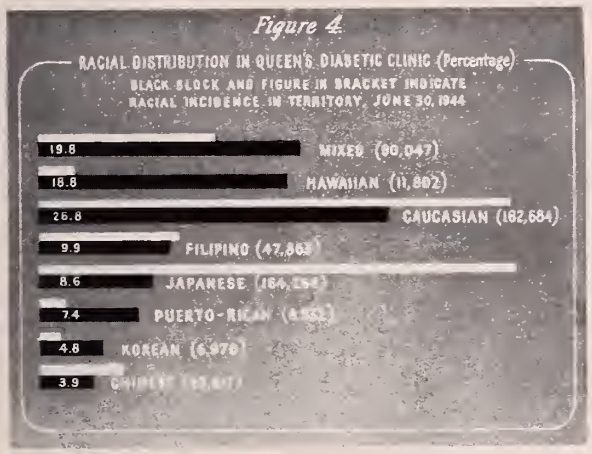


Age Groups. — Those patients in the fourth decade of life represented the largest single group. The graph bears no relation to the onset of diabetes as this could not be adequately determined. The groups shown refer to the age of the patients when first seen in the clinic (Fig. 3).

Racial Distribution. —(Fig. 4) The Caucasians formed the largest single racial group in the clinic.



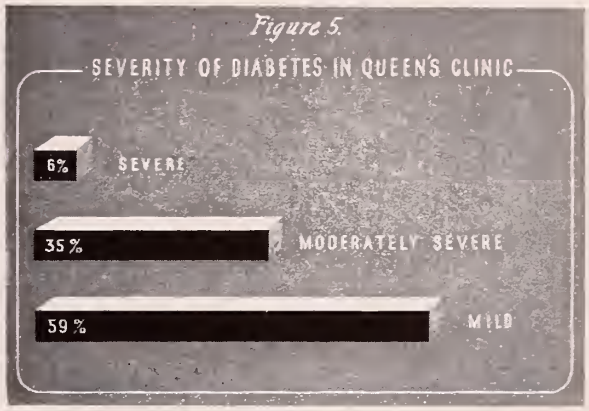
Of the 26.8 per cent comprising this group, almost 66 per cent were of Portuguese descent. Patients of mixed ancestry included 19.8 per cent of the total patients. Of this group, 75 per cent were part Hawaiian (36 of 48). In successive order came the Hawaiians (18.8 per cent), Filipinos (9.9 per cent), Japanese (8.6 per cent), Puerto-Ricans (7.4 per cent), Koreans (4.8 per cent) and the Chinese (3.9 per cent). The population of these groups in the territory is shown for contrast.



Familial Incidence.—When possible we ascertained whether or not there was a familial history of diabetes. In 163 cases the records were inadequate or the patients did not know. Of the remaining 69 there was a definite diabetic history in 31 instances or 13.3 per cent of the 232 patients analyzed. Thirty-eight patients categorically denied any incidence of diabetes in their families.

Severity of Diabetes.—We have arbitrarily designated as "mild" those patients who were adequately controlled by diet alone or with insulin up to 15 units daily; "moderately severe," those patients using 15 to 50 units of insulin daily; and "severe," those patients needing more than 50 units of insulin daily. One hundred and thirty-six were mild, eighty-one were moderately severe, and fifteen were severe (Fig. 5).

Hospital Admissions. — Careful checking revealed that on fifty-five occasions patients from the diabetic clinic were admitted to one of the local hospitals. The causes were not always attributable to their diabetic condition. Obstetrical cases were not included in this analysis.



Causes of Death Among Diabetics.—Eighteen clinic patients died during the first five years. In several instances the patient had ceased to attend the clinic long before his death. The causes of death were taken from hospital records and death certificates. With the exception of the case reported as having died following diabetic coma, there is adequate evidence to support the diagnoses listed (Fig. 6).

SUMMARY

1. Two hundred and thirty-two patients were enrolled in The Queen's Diabetic Clinic during the first five years of its operation.

2. An analysis of data pertaining to these patients is submitted.

FIG. 6.—*Causes of Death in Diabetic Clinic Patients*

CAUSE OF DEATH	NUMBER OF CASES
Cerebral accidents (thrombosis, hemorrhage and embolus)	4
Hypertensive cardio-vascular disease	3
Coronary thrombosis	2
Pulmonary tuberculosis	2
Acute hemorrhagic pancreatitis	1
Carcinoma of the stomach	1
Carcinoma of the cervix	1
Toxic diffuse hyperplastic thyroid with thyrotoxic heart disease	1
Crushing injury of the head	1
Diabetic coma*	1
Chronic glomerulonephritis	1
Total	18

* Diagnosis not confirmed.

II. THE DIETITIAN'S DATA

LILLIAN ELSHOLTZ PAGE, M.S., MORTON E. BERK, M.D., AND VIRGINIA C. OTT HERBST, M.S.
HONOLULU

Successful control of diabetes depends upon the patient. He must follow the physician's recommendations and learn to accept the necessary changes in daily routines and food patterns. One of the reasons for the organization of The Queen's Diabetic Clinic was to help the patients, as individuals, make these adjustments.

Diet is one of the most important means of controlling diabetes. The diet need not consist of special "diabetic" foods; instead, the person with diabetes may learn to select his food from the family meal with a few variations. The diabetic diet, just as the normal diet, must be adequate and balanced in protein, fat and carbohydrate. It must also meet the body's requirements of vitamins, minerals and roughage in order to maintain the person in good health and avoid borderline deficiencies and general gastro-intestinal disturbances. The diabetic diet differs mainly from the normal diet in that the amount of all foods is carefully planned.

A "Yardstick of Good Nutrition" has been set up by the National Committee of Food and Nutrition. By referring to this "yardstick" each person may check his own diet to insure fulfillment of the daily requirements. The "yardstick" consists of the seven basic food groups shown in Table 1.

TABLE 1.—*Seven Basic Food Groups of the Yardstick of Good Nutrition*

FOOD GROUPS	DAILY SERVINGS
1. Green and yellow vegetables	One at least
2. Citrus fruits, raw green vegetables, or papaya, guava and pineapple	One at least
3. Potatoes and other vegetables and fruit	2 or more
4. Milk and milk products	1 pint for average adult
5. Meat, poultry, fish, and eggs or substitute	1
6. Breads and cereals, whole grain	3 or more
7. Butter and fortified margarines	At least 3 teaspoonsful

Complete the diet by using other foods or additional servings of the above seven groups.

Since the food intake of a person with diabetes should not exceed the diet prescription in amount, the diabetic diet must be very carefully planned. The Diabetic Clinic dietitian must incorporate into a workable plan the following varying factors:

1. The physician's prescription.
2. The foods constituting an adequate diet—or the basic seven food groups.
3. The patient's home dietary habits.

This last factor is the most difficult to handle. Food habits are not changed easily even when health depends upon it. For this reason each patient receives individual instruction and the diet is planned according to the patient's likes, habits and family pattern. The dietitian helps the patient learn to control his diet by frequent conferences, repeated stressing of important changes in food habits, demonstrations where food is shown in weighed and measured amounts, and by carefully checking the patient's daily food reports. The purpose is to teach the diabetic patient to eat the prescribed foods in their proper quantities at the family table, to have increasing confidence in his own ability to select food and to be able to eat at social dinners or in restaurants without deviating too much from his diet.

In analyzing the ability of the Queen's Diabetic Clinic patients to follow a fixed dietary regimen, we have chosen the following classifications:

"Very Satisfactory" (V. S.). Patients who have followed their diet pattern in an excellent manner; they know the amount of foods for each meal, the "sugar value" of fruits and vegetables, substitutions and combinations of food; they keep accurate diet records which have been checked and corrected when necessary; and they show consistent interest and determination. Most of these patients plan their meals easily and are able to select their food allowance from the family table.

"Satisfactory" (Sat.). Patients who know their diet pattern well; they know the foods that are low in "sugar value" which may be eaten in average to large servings, and they know the foods that are high in carbohydrate which must therefore be carefully restricted in amount. Many do not read or write but have learned by discussions, food demonstrations and experiences; others have a language handicap which has made instruction and learning very slow.

"Fairly Satisfactory" (F. S.). This class includes a greater variety of responses. Many of these patients are sincere and try to follow their diets but are not consistent. Life-long eating habits, emotional unrest, financial problems, demands of their work, overcrowded housing conditions and intellectual limitations interfere. All these factors make a dietary regimen more difficult to follow. By repeated discussions and conferences, these patients have learned which foods should be included daily, which foods are high in carbohydrate and which ones should be carefully avoided.

"Uncooperative." These patients have also had repeated conferences regarding dietary control but remain indifferent to their problem. It is very difficult for them to make the necessary adjustments required by the change in their physical condition. They blame their work, their family and often their financial situation for failure to follow the prescribed diet.

"No Check." This group consists of patients who have not been attending clinic long enough to be classified or who have dropped out before any satisfactory regimen had been set up. Some may have benefitted by their instructions, but we have no way of checking their progress.

The classification in Table 2 is based on an analysis of the 232 patients seen during the past five years of the Queen's Diabetic Clinic.

TABLE 2.—*Classification of 232 Diabetic Patients on the Basis of Dietary Control*

DIETARY CONTROL	NO. OF PATIENTS	%
Very satisfactory	24	10.4
Satisfactory	82	35.4
Fairly satisfactory	60	25.8
Uncooperative	34	14.6
No check	32	13.8
Total	232	100.0

Repeated conferences regarding diet are necessary to bring about any change in food habits. Table 3 shows the relationship between dietary control and attendance at clinic. It demonstrates that as patients' ability to follow a dietary pattern decreased, their absences at clinic appointments increased. Over half of those who are in the "V. S." and "Sat." groups have attended clinic regularly; of those who are classed "F. S." almost one-half failed to keep 50 per cent of their appointments; and two-thirds of the "Uncooperative" patients have kept less than 50 per cent of their clinic appointments. In the "No Check" group, 14 patients have been regular in attendance. Of these, ten are too new to be classified, two have moved away, one died and one proved to be non-diabetic.

TABLE 3.—*Relationship of Diabetic Clinic Attendance to Dietary Control Classification*

DIET CONTROL	ATTENDANCE AT CLINIC APPOINTMENTS			
	Regular	*½ to ¾*	*Less than ½*	*Totals*
Very satisfactory	16	8	0	24
Satisfactory	47	22	13	82
Fairly satisfactory	16	16	28	60
Uncooperative	2	9	23	34
No check	14	2	16	32
Total	95	57	80	232

There were 76 patients attending the Queen's Diabetic Clinic at the time these studies were made. An analysis of this group indicates more clearly the relationship between clinic attendance and good dietary control (Table 4). Forty-five patients or 59 per cent of the total are regular in attendance and have been classed in the "V. S." and "Sat." groups. Only two patients who have attended less than half of their clinic appointments have been classed as "F. S."

TABLE 4.—*Relationship of Diabetic Clinic Attendance to Dietary Control Classification in Active Clinic Patients (May, 1945)*

DIET CONTROL	ATTENDANCE AT CLINIC APPOINTMENTS			
	Regular	*½ to ¾*	*Less than ½*	*Totals*
Very satisfactory	11	4	0	15
Satisfactory	34	3	0	37
Fairly satisfactory	7	2	2	11
Uncooperative	0	2	1	3
No check (or no return to date)	10	0	0	10
Total	62	11	3	76

SUMMARY AND CONCLUSIONS

1. Eating habits are fixed patterns established by daily repetition throughout life. To change these habits even for the purpose of controlling diabetes requires the constant attention of the patient, with supervision and correction by the dietitian. The diabetic diet of today approaches the normal diet very closely and can be selected from the family table with few modifications. At the Queen's Diabetic Clinic patients are given frequent return appointments at first until the diabetic regimen has been fairly well established. Their dietary problems are discussed, old habits are broken down and new food routines are built up.

2. A classification of diabetic patients is offered on the basis of dietary control.

3. An evaluation of the relationship between clinic attendance and dietary control classification suggests the more conscientious a patient is about his diet, the better is his attendance record.

1133 Punchbowl Street.

Part three of this article will appear in a subsequent issue.—Ed.

ERYTHROBLASTOSIS FETALIS AND ICTERUS PRAECOX

FOUR CASE REPORTS

F. D. NANCE, M.D.
HONOLULU

TWO CASES of erythroblastosis fetalis due to Rh factor, and two cases of icterus praecox, are reported to illustrate the following features:

1. There is marked variability in time and type of onset of symptoms.

2. Attention is invited to the syndrome of icterus praecox caused by hemagglutinins anti-A or anti-B, described by Halbrecht in the *American Journal of Diseases of Children* 68: 248 (Oct.) 1944. The course is said to be benign, but as Case 4 illustrates, it may be almost identical with erythroblastosis fetalis.

3. In severe cases, restoring and maintaining a normal level of red blood cells and hemoglobin does not always maintain life.

CASE REPORTS

CASE 1. *Erythroblastosis due to Rh factor—late onset.*

J.W., female, was born at Kapiolani Hospital, February 19, 1945. Two siblings were normal. This infant, apparently normal at birth, developed on the second day of life a fairly marked jaundice which had nearly cleared by the sixth day. At that time, she appeared to be paler than normal, although active and gaining normally. A blood count on February 25 showed hemoglobin 70 per cent, red cells 3.5 million, no nucleated red cells seen. It was assumed that she had had only an exaggeration of the normal hemolysis of the newborn, and she was discharged on February 26.

On February 28 she began to vomit feedings and was noted to be markedly pale. Blood count showed hemoglobin 18 per cent, red cells 800,000; numerous nucleated red cells in all fields. Rh factor was positive, mother's Rh factor was negative, and anti-agglutinins were demonstrated in the mother's serum.

The baby was sent to Children's Hospital, where two transfusions of 60 cc. Rh negative blood were given on successive days. She made a prompt recovery, jaundice and nucleated red cells disappeared. She has been followed for ten months and blood count and development have been normal.

CASE 2. *Erythroblastosis due to Rh factor—early onset, fatal outcome in spite of repeated transfusions.*

R.J., male, was born at Kapiolani Hospital January 5, 1946. There was one normal sibling. Rh factor had been determined on parents before the delivery; the father was Rh positive, the mother Rh negative. Accordingly, the obstetrician was aware in advance of the possibility of erythroblastosis and was looking for evidence. The infant was born at night and under artificial light appeared to be normal at birth. By next morning he was obviously jaundiced, and rather listless. Examination showed jaundice, pallor, and moderate distention of the abdomen, with large distended abdominal veins forming a "caput medusae." Liver and spleen were palpable. Blood count showed red cells 2.87 million, leucocytes 60,400, hemoglobin 75 per cent, 33 nucleated red cells per 100 leucocytes, and Rh factor positive. A diagnosis of erythroblastosis fetalis was made, and transfusion of 80 cc. Rh negative type O blood was given. At the close of the procedure, color was good. Next morning his condition was apparently good; he was taking fluids well, blood count showed 4.39 million red cells, leucocytes 33,100, hemoglobin 103 per cent, nucleated red cells 23 per 100 leucocytes.

By afternoon he began to be paler, distention became marked, and continual vomiting of bile-stained fluid started. At 10 p.m. the blood count had dropped to 3.5 million, and the hemoglobin to 65 per cent. A second transfusion of 90 cc. Rh negative blood was given: color improved but vomiting and distention grew worse in spite of enemas, gastric lavage and parenteral fluid. He died at 5 a.m.

Autopsy showed marked enlargement of liver and spleen, but no actual hydrops of these organs. There was no mechanical intestinal obstruction. Death seemed due to liver damage rather than anemia.

CASE 3. *Icterus praecox due to hemagglutinins anti-B; benign course, but required transfusion.*

R.A., male, Japanese-Hawaiian, was born in St. Francis Hospital on September 29, 1945. Three siblings had normal neonatal histories, but the fourth had been markedly jaundiced, although apparently otherwise healthy, for a period of one month after birth, after which he recovered spontaneously. The present child, fifth in the family, had apparently been considered to be normal during his hospital stay, and was discharged, gaining well on breast feeding, on October 5. The mother, however, stated that he had "looked too yellow" to her "from the day he was born." By October 7 jaundice was quite marked and the mother noted unusual darkness of urine and stools. This grew progressively more marked until I first saw him on October 10.

At that time the only abnormal finding was deep jaundice. Blood count showed hemoglobin 59 per cent, red cells 2.59 million, leucocytes 17,000; normal differential, no nucleated red cells seen. Baby's Rh factor was positive, blood type B. Mother's Rh factor was also positive, blood type A.

A diagnosis of icterus praecox was made, and in view of the mild degree of anemia and the reportedly benign course of the disease, he was put on iron and told to return in one week.

On October 19, the blood count had dropped to hemoglobin 40 per cent, red cells 1.56 million. No nucleated red cells were seen.

He was taken to Children's Hospital where a transfusion of 90 cc. type B blood was given. Breast feeding

was discontinued on the theory that some anti-B agglutinins might be transmitted in this way. Blood count promptly rose, and the urine was free of bile in twenty-four hours. Jaundice was clear by October 23. His subsequent development has been normal.

CASE 4. *Icterus praecox due to hemagglutinins anti-B—rapid onset, symptoms identical to erythroblastosis due to Rh factor.*

J.M., Japanese-Okinawan, female, was born at Kuakini Hospital on October 28, 1945. Mother had a hydramnios, and the infant apparently inhaled some amniotic fluid during delivery and required suction and vigorous resuscitation. After this, the baby seemed entirely normal until the afternoon of October 30, when the nursery nurse found the baby breathing in a very shallow manner, and extremely pale. Examination at that time showed the baby in apparent shock, skin pale, cold perspiration on face and extremities, pulse thin and rapid. Lung fields were clear. There was a large ecchymosis over the back, apparently the result of resuscitation measures. Blood count showed hemoglobin 40 per cent, red cells 1.45 million, leucocytes 19,450, "numerous" nucleated red cells. Bleeding time 7 minutes. A diagnosis of erythroblastosis fetalis and Vitamin K deficiency was made. Coramine and oxygen were given, producing some improvement. Laboratory reports on Rh factor were confusing: the infant was Rh positive, the mother showed agglutination. It was felt safest to use Rh negative blood; this was obtained from the blood bank and 60 cc. was given into a scalp vein. A prompt improvement resulted. Subsequent blood counts on October 31, November 1 and November 2 showed a steady blood level at 70 per cent hemoglobin, red cells 3.5 million. Nucleated red cells disappeared from the smear in forty-eight hours. There was never any but the slightest jaundice noted. Subsequent progress has been normal.

The conflicting reports on Rh factor in this case brought it to the interest of Mrs. Welty of the blood bank. She carried out intensive studies on the blood of mother and child, which she will report in a separate communication, which demonstrates clearly that both mother and child were Rh positive, and that the cause of the anemia and erythroblastosis was hemagglutinins anti-B, present in extremely high titer in the mother.

1133 Punchbowl Street.

Hawaii Medical Service Association

A NON-PROFIT ASSOCIATION PROVIDING MEDICAL AND HOSPITAL CARE

News Notes

- The Hawaiian Pineapple Co. experimental plan is now in effect for constant study by the Medical Societies, to enable them to offer "the doctors plan" for prepaid medical care.
- The Veterans Plan went into effect September 1st—this allows veterans their "free choice of physician."
- The physicians reserve fund has been returned to the H.C.M.S. members—with a note of thanks from the Association.

"Boost H.M.S.A. to Your Patients"

●

Serving and Conserving the Community Health

Hawaii
MEDICAL JOURNAL
OFFICIAL PUBLICATION OF THE HAWAII TERRITORIAL MEDICAL ASSOCIATION

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[EDITORIALS]

ROBERT HENRY ONSTOTT

1905 - 1946

Dr. Robert H. Onstott, Medical Director, U.S.P.H.S., was killed in an automobile accident near Emigrant Gap, California, on September 4, 1946.

Dr. Onstott was born November 30, 1905 at Colorado Springs, Colorado. He was graduated from the University of Colorado School of Medicine in 1930 and interned at the U. S. Marine Hospital, San Francisco. He was commissioned an officer of the U. S. Public Health Service on July 1, 1931 and had remained in that service up to the time of his death. In November, 1943 he came from Atlanta, Georgia to Honolulu to become chief of the U. S. Public Health Service in Hawaii. He left his Honolulu position in August for reassignment as director of commissioned personnel for the entire U. S. Public Health Service.

Dr. Onstott was a Fellow of the American Public Health Association and of the American Medical Association, and had been a service member of the Honolulu County Medical Society for two years; he rarely missed a meeting of the latter organization. He took an active personal interest in medical affairs in this community. Much of the success of the elaborate post-graduate educational session of the Honolulu County Medical Society in January, 1945, was due to his diligent and intelligent assistance. His personal survey of Honolulu's hospital needs in 1944 helped lay the groundwork for the present hospital expansion plans. He was instrumental in forming late in 1945 a group of local businessmen and doctors which met monthly to study medical economic questions.

We speak for his scores of friends here in mourning his untimely death and in extending to Mrs. Onstott and their daughter, Judy, our deepest sympathy in their bereavement.

IS FEE-SPLITTING FOR EYEGLASSES ILLEGAL AS WELL AS UNETHICAL?

In 1924 the Section of Ophthalmology of the American Medical Association condemned the practice of optical houses' rebating part of the price of eyeglasses to the physicians who referred the customer to them; this practice was stated to be "just as reprehensible as the splitting of fees."

In 1942 the House of Delegates of the American Medical Association passed a resolution condemning the practice as "disreputable and unscrupulous" and authorizing component county medical societies to discipline members found guilty of participating in it.

In 1943 the HAWAII MEDICAL JOURNAL called attention editorially to the fact that the practice was being indulged in by certain ophthalmologists and optical firms in Honolulu, and urged that it be stopped; and following this several local practitioners did stop participating in it, despite the vigorous protests of some of the optical firms involved.

Now in 1946, as reported in the Aug. 3, 1946 issue of the *Journal of the American Medical Association,* comes the Department of Justice of the United States with two complaints in which they charge certain optical wholesalers and a representative selection of ophthalmologists in various parts of the country, with violation of the Sherman Anti-Trust Act by conspiracy to fix the price of spectacles by adding to their real price a cash rebate which is returned to the physician. Additional suits are to be filed as more evidence is accumulated.

This is at least the fourth "word to the wise"; let's hope it will be sufficient.

LEPROSY IN HAWAII, 1945-1946

The 1945-1946 Annual Report of Mr. Harry Kluegel, Superintendent of Hospitals and Settlement, to his Board, contains much interesting information about the status of leprosy in Hawaii.

The outstanding fact, perhaps, is that leprosy in Hawaii is now being treated—for the first time since the demise of chaulmoogra oil and the chaulmoogrates some ten or fifteen years ago—with something more than, as Dr. N. E. Wayson used to say, "kindness." Fifteen patients at Kalihi Hospital, and 7 at Kalaupapa, are being given Promin intravenously; several more are receiving quinacrine (Atabrine) orally; and two newer preparations, Pyricidin and a new Lilly anti-mycobacterial drug, are to be started soon at Kalaupapa. It is a day of new hope, and real hope, for the victim of lepromatous leprosy as well as for the always more hopeful tuberculoid cases.

The rapidly declining incidence of leprosy, which seems attributable (since so many of the new cases are early and minimal) only to isolation and perhaps increasing community-wide immunity, is of interest. The average annual number of new cases from 1931 to 1936 was 56.6; from 1936 to 1941 it was 40.6; from 1941 to 1946 it was 30.6. Twenty-seven new cases were officially certified in the fiscal year just ended, the same number as in 1941-1942 (and three more than in 1944-1945). Perhaps the rapidity of the decline is slackening a little, as is only to be expected, of course. The total number of active cases of record has declined from 419 to 331 during the war, and the number of patients on "temporary release" status has increased from 166 to 183.

Of the new cases certified during the year just past, 13 (48 per cent) were Hawaiians or part-Hawaiians and 6 (22 per cent) were Filipinos. One-fourth of the new cases were from 12 to 20 years of age, and three-fourths were under 40. A history of contact with the disease was obtained, as usual, in slightly less than half the cases. It would not be safe to infer, however, that it is more dangerous *not* to be related to a leprous person than it is to *be* related to one!

Of the maximum of 203 persons on "temporary release" status during the year, only 5 experienced a relapse and had to be temporarily isolated again. This speaks well, certainly, for the criteria on which the decision to release such cases is based. Four patients were fully discharged, as being presumably well; 9 died, and 2 left the Territory.

The war-time practice of keeping all actively leprous children at Kalaupapa instead of at Kalihi Receiving Station is apparently to be continued. This is a praiseworthy plan, for the children lead an almost perfectly normal life at Kalaupapa, with schooling, religious training, athletics and other group activities, and recreation. Release is just as readily effected from Kalaupapa as from Kalihi, whenever the disease subsides or enters on a remission. Transportation to and from Kalaupapa by air has recently been re-established.

The whole report is a reassuring and hopeful one, and one which Mr. Kluegel may well take pride in presenting.

DIASONE AND PROMIZOLE FOR LEPROSY

Faget, Pogge and Johansen[1] have recently submitted an interim report on the effect of diasone

[1] Faget, G. H., Pogge, R. C., and Johansen, F. A.: Present Status of Diasone in the Treatment of Leprosy: Brief Clinical Note, Pub. Health Reports 61: 960 (June 28), 1946.

(disodium formaldehyde sulfoxylate diamino diphenyl sulfone, Abbott) in leprosy, which indicates, as previous reports have done, that it is decidedly effective. Sixty-six patients have taken it for six months or longer, in doses of from 0.33 to 1.00 grams daily, by mouth. Of these, none are worse; 65 per cent are definitely better; 24 per cent have become bacteriologically negative in the "snips". Twenty-four patients, or about one-fourth of those originally given the drug, were unable to continue taking it for the following reasons: increased erythema nodosum (5 cases), eczematoid dermatitis (5 cases), gastric intolerance (5 cases), hematuria (4 cases), anemia (2 cases), iridocyclitis (2 cases), and drug fever (1 case). Hematuria seems to have been eliminated by starting all patients on 0.33 gm. daily for the first two weeks and gradually increasing the dose to 1.0 gm. daily. In summary, then, the drug seems slightly more effective than promin (though their effects are similar), and less toxic than promin; and it has the tremendous advantage of being given orally instead of intravenously. Unfortunately it is not yet available here.

Promizole (2,4′-diamino-5-thiasolylphenyl sulfone, Parke Davis) has been employed by the same authors[2], and its effect in 7 cases has been highly encouraging, though only one case has become bacterioscopically negative. Like diasone, it is given orally. It seems to be well tolerated, and its effect on the lesions of lepromatous leprosy appears to be manifested very rapidly, within only a few weeks.

The good reputation these drugs are acquiring, unlike the reputation once acquired by chaulmoogra oil and its derivatives, seems to be well deserved. They do not appear to cure leprosy, but they frequently arrest it. We seem to be on the right track at last.

[2] *Idem:* Promizole Treatment of Leprosy: a Preliminary Report, *ibid.*, p. 957.

A.M.A. MEMBERSHIP AND RESIDENCE

The question of dual or multiple membership in constituent county societies or state associations has been clarified by a recent communication from the Membership and Fellowship Department of the American Medical Association.

A physician may maintain membership in as many county medical societies or state medical associations as he pleases. For purposes of record, however, the A.M.A. carries him as a member of only one county and state organization, namely, the one in which he resides, or practices, or both.

In order to maintain his membership in the A.M.A., a physician who changes his residence and his practice from one *state* (or territory) to another must, within one year, become a member of the constituent association in the state to which he has moved. If he fails to do so, he is automatically dropped from membership in the A.M.A., irrespective of whether he has maintained membership in the county society in which he formerly practiced and lived. The same is true of Fellows of the A.M.A., except that they may, if refused membership in the county to which they have moved, appeal to the Judicial Council of the A.M.A.

The only exception to this rule is that on removal to an *adjacent* state, if that state organization waives jurisdiction over the member, he is not required to join the county society in the county to which he has moved; he may merely maintain his former membership, and all will be well. How this rule might be applied to Hawaii, we don't know; probably it would not be applied here at all.

WELCOME, "PACIFIC SCIENCE"

Pacific Science, a new quarterly publication sponsored by the University of Hawaii, is to appear in January, 1947. It will be edited by Dr. A. Grove Day of the Department of English of the University of Hawaii, with the assistance of eleven specialists in nine different fields of science. It is the new journal's purpose to publish research papers relating to the Pacific region, in the fields of zoology, botany, ornithology, entomology, ichthyology, physics, chemistry, geology, physical geography, soil science, climatology and meteorology, hydrography, oceanography, and volcanology. The deadline for the first issue is December 1, 1946.

This journal will fill a much needed place in Hawaii, and should be a suitable medium for publication of the papers read before the Hawaii Academy of Science. Undoubtedly some of the material published will be tangent to medical problems, and we will try to abstract such papers in the HAWAII MEDICAL JOURNAL.

COUNTY SOCIETY REPORTS

KAUAI COUNTY MEDICAL SOCIETY

The regular meeting of the Kauai County Medical Society was held on Wednesday, February 13, 1946 at 7 p.m.

Members present: Drs. Umaki, Liu, Chisholm, Wallis, Chang, Masunaga, Boyden, Kuhns, Brennecke, Wade and Depp; guest: Dr. Toney.

Report of Committees:

Committee on HMSA—Dr. Wallis, Chairman of the Committee, reported that at the last meeting of the Directors, Mr. Carsten had submitted his resignation which was accepted. Mr. Carter of the HMSA was present. Of two applicants, the Board of Directors of the KMSA appointed Mr. Achor as replacing Mr. Carsten. The financial status of the KMSA was reviewed. At present there are 700 in the plan. It was felt if this figure could be raised to 1,000, the plan would be successful. The possibility of veterans coming under this plan was being entertained.

Laboratory Committee—There was considerable discussion on the problem of acquiring a pathologist. Tentative plans drawn up by the various interest groups, meeting with the Laboratory Committee, evolved the possibility of raising about $950 monthly, as follows:

HSPA—$300; Wilcox Hospital—$250; Waimea Hospital — $200; Police Department — $150 (if as County Coroner); Canneries—$25 each. Figures in each case were tentative.

The Committee will meet further with these various groups to obtain a fairly definite figure as to the amount that can be raised. The majority present realized that the idea of a combined pathologist-radiologist would not be feasible nor easily obtainable and motion was made by Dr. Brennecke and seconded by Dr. Wade that the Society endeavor to obtain a pathologist. Motion carried. It was suggested that Dr. Toney write to Dr. Wadsworth, a pathologist, who had previously voiced a desire to practice in Hawaii, explaining the Kauai plan and obtaining his reaction. Dr. Chisholm suggested that the Society contact local pathologists for leads.

Letter from Mrs. Bennett was read, regarding the annual meeting of the Hawaii Territorial Medical Association. The Honolulu County Medical Society was having Dr. Leake, Professor of Pharmacology at the University of Texas, as guest speaker for the postgraduate lecture. It was moved by Dr. Wallis and seconded by Dr. Kuhns that the Society write to Mrs. Bennett, requesting that Dr. Leake be invited to come to Kauai. Motion carried.

Board of Censors—consisting of Drs. Chisholm, Brennecke and Liu—announced the following nominations for the ensuing year:

President.....DR. KUHNS
Vice President.....DR. WADE
Secretary.....DR. HARRIS
Delegate.....DR. WALLIS
Alternate Delegate.....DR. BOYDEN

A paper by Dr. Liu on Arthritis was given with discussion of its various aspects.

* * *

The regular meeting of the Kauai County Medical Society was held at the Wilcox Hospital, Wednesday, March 13, 1946 at 7 p.m.

Members present were Drs. Wallis, Boyden, Masunaga, Liu, Wade, Kuhns, Umaki, Depp, and Harris. Guests were Dr. Toney, Dr. Ellinger, U.S.P.H., Capt. Gross and Arthur Achor.

The meeting was then turned over to Capt. Gross of the Board of Health. He discussed the water supply on Kauai and stated, together with proof thereof, that the majority of water sources are unsafe as gauged by the Board of Health. Chlorination of the water was undertaken by the U. S. Engineers during the period of martial law in the islands. The chlorinators used then have since been offered for sale to the county, who refused the offer. Capt. Gross believes that they should be kept in reserve by the County in event of an emergency where purification of the water supply is imperative. He earnestly requested that the society go on record as favoring the purchase of these chlorinators if they saw fit to do so. There was much interest shown by the members concerning this subject as evidenced by the discussion and numerous questions asked.

Dr. Liu made a motion, seconded by Dr. Boyden, that the secretary write a letter to Chairman Ellis and the Board of Supervisors informing them that the Kauai County Medical Society is in favor of the purchase and retention of the chlorinators by the County for use in emergencies. Carried.

Arthur Achor, new director of the K.M.S.A., talked briefly on the feasibility of adding high school students to the membership of the organization as Class B members. He reported that various school officials are in favor of the plan.

Dr. Wallis moved that the society go on record as approving KMSA's plan to include high school students in their membership. Seconded by Dr. Boyden. Carried.

Psychiatric Committee report given by Dr. Wallis was in answer to the question "Who is responsible for medical care of mental patients awaiting admission to the Territorial Hospital after they have been committed?" Dr. Wallis quoted the law, which states "that the patient shall pay for medical care unless the patient is indigent, in which case the County shall pay."

Laboratory Committee Report: Some of the salient features were the suggestions that all doctors on Kauai contact pathologists they may know with regard to filling the position; request Dr. Fennel to help determine the qualification of applicants. A tentative salary of $10,000 per annum has been raised.

The election of officers for the year 1946-1947 took place, with the following results:

President.....Dr. Wade
Vice President.....Dr. Depp
Secretary-Treasurer.....Dr. Harris
(serving 2nd of 3 year term)
Delegate.....Dr. Boyden
Alternate Delegate.....Dr. Brennecke
Board of Censors.....Dr. Umaki
to replace person whose term expires next

Dr. Boyden made a motion, seconded by Dr. Liu, that the society not submit any candidates for president of the Hawaii Territorial Medical Association until Kauai is able to provide for an annual meeting here. Passed.

Dr. Boyden suggested the secretary send out a monthly announcement of the program to be presented, and also contact each member requesting interesting cases they care to present.

I. Umaki, M.D.
Secretary pro tem.

* * *

The regular monthly meeting of the Kauai County Medical Society was held at the Wilcox Memorial Hospital, on Wednesday, May 8, 1946 at 7 p.m., Dr. Wade in the chair, and Dr. Chisholm acting as secretary.

Members present were Drs. Brennecke, Boyden, Cockett, Depp, Kuhns, Wade, Wallis and Masunaga. Guests were Dr. Toney and Professor Leake. Drs. Auchter and Collins from the Pineapple Research Institute were also present.

Resignation of Dr. Homer W. Harris as Secretary-Treasurer of the Kauai County Medical Society was accepted and Dr. Eichi Masunaga was elected in his place.

The members of the Society unanimously accepted Dr. Patrick Cockett's application for membership in the Kauai County Medical Society.

Outline of the tuberculosis case-finding program was sent to each member of this Society previous to this meeting. After brief thought on this plan members present voted to accept this plan in toto.

In conclusion of the business, the evening was turned over to our guest speaker, Dr. Leake who gave an authoritative review of pharmacology.

* * *

The regular monthly meeting of the Kauai County Medical Society was held at Dr. Chisholm's home on Wednesday, June 12, 1946 at 7:15 p.m.

Members present were Drs. Wade, Wallis, Depp, Umaki, Chisholm, Cockett, Liu, Boyden, and Masunaga. Guests were Drs. Toney, Young, and Wilbar, Jr.

Dr. Wallis reported on progress made for obtaining a pathologist from the mainland, but so far no definite appointment has been made.

Dr. Wilbar is looking forward to placing a full-time County Health Officer on Kauai. He has one man in mind who will finish training at Harvard in January. He believes a psychiatric social worker will also be procured for Kauai sometime.

Dr. Wallis asked about the supply of immune serum for measles and Dr. Wilbar stated that the serum should be available here.

Dr. Chisholm found a case of active tuberculosis among the Filipinos recently brought from the Philippines. A question was raised as to the thoroughness of physical examination of these laborers prior to their departure from the Orient. Dr. Wilbar thought they were supposed to have had physical examination, x-ray of chest and blood serology.

Dr. Wilbar also stated that in two or three months the mobile unit should be here again and thought that all these new Filipinos should be x-rayed.

Dr. Chisholm of the Program Committee discussed subphrenic abscess and Dr. Wallis presented his case report of this condition.

Meeting was adjourned at 9:45 p.m. and the balance of the evening was given over to the enjoyment of Dr. Chisholm's hospitality.

Eichi Masunaga, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

A monthly meeting of the Honolulu County Medical Society was held on June 7, 1946 in the Mabel Smyth Building with Dr. Bowles presiding. Seventy members and guests were present.

Two Navy training films were shown: Life Cycle of Endamoeba Histolytica, and Malaria.

A welcome was extended to new members of the Society: Dr. Kwan Heen Ho, Dr. Yokichi Uyehara, Dr. Clifford Kunio Mirikitani, Dr. Robert Marks; and two new Service members: Dr. Lawrence W. Brown and Colonel George F. Baier, III.

The doctors were reminded that all members of the Medical Society are welcome to attend meetings of the Board of Governors. The County Society meets on the first Friday evening each month. The Board of Governors hold their meeting on the preceding Tuesday afternoon at four o'clock in the Medical Society office.

Captain F. Kartschner and Lieutenant I. Korner of the U. S. Army Medical Corps discussed "Etiology and Therapy of Acute Situational Maladjustments."

Refreshments were served on the lanai.

* * *

The Honolulu County Medical Society met on July 5, 1946 in the Mabel Smyth Building. Dr. Gotshalk presided and there were 63 members and guests present.

A series of films entitled "Physical Diagnosis" has been borrowed from the A.M.A. in Chicago by this Society. The first two reels, "Abnormalities in Gait" and "Other Types of Involuntary Movement," were shown at this meeting.

Dr. Herbert Y. H. Chinn was welcomed as a new member of the Society.

The chairman reported on the actions of the Board of Governors. Mr. Neil Ifversen had brought before the Board several problems on which H.M.S.A. is working, including health insurance for pupils of McKinley, Roosevelt and Punahou, and a new proposal for medical care of Hawaiian Pine employees on Lanai. No action was taken on these plans at this time. The fee schedule for the medical care of veterans has now been completed and submitted to General Hawley for the approval of the Veterans Administration.

Some of our members have been invited recently to write articles or broadcast radio talks on health topics for the public. In this connection the Board of Governors voted that all written or broadcast publicity sponsored by the Honolulu County Medical Society shall be presented anonymously, with no names of individual doctors attached, but only the name of the Society itself.

The Hawaii Dietetic Association is preparing a standard diet manual for the use of hospitals and physicians, which will be applicable to local conditions and to the people of Hawaii. The Board of Governors approved of these standard diets in principle.

Under Dr. Perlstein's leadership, a study is being made to determine what groups of specialists hold organized meetings in Honolulu, such as surgeons; eye, ear, nose and throat men, etc. It is proposed that information as to time and place of such meetings be made available to all members of the Society, so that doctors may attend meetings of interest to them.

The evening program for this meeting consisted of three papers: "Current Medical Legislation" by Dr. Charles L. Wilbar, Jr., "X-Ray Therapy in Non-Malignant Lesions" by Dr. Philip S. Arthur, and "Roentgenological Characteristics of Intrathoracic Tumors" by Dr. Louis L. Buzaid. Refreshments were served on the lanai.

* * *

The August 2, 1946 meeting of the Honolulu County Medical Society was held in the Mabel Smyth Building with Dr. Gotshalk presiding. There were 75 in attendance.

Dr. Douglas H. Murray was welcomed as a new member, joining this Society by transfer from Maui.

It was announced that again we owe a debt of gratitude to Dr. Mossman, who originally succeeded in arranging for the Medical Society to receive 20 per cent of all indigents' hospital bills in consideration of the medical services rendered the indigents by our members. When this was passed in 1943, a limit of $12,000 was set for such payments in any calendar year. In this first half of 1946 we have already received our $12,000. With the support of our doctors, Dr. Mossman has now persuaded the Board of Supervisors to remove the limit entirely, so that the Medical Society will continue to receive a straight 20 per cent of the hospital bills for medical care of indigents.

Dr. Arnold, Jr. spoke of the present plight of the Nursing Service Bureau, which may be forced to discontinue for lack of funds. The members will be polled to determine how many doctors feel that the Physicians' Exchange and the Nursing Service Bureau should be continued by some means.

A series of radio programs from the A.M.A. is now being broadcast on KGU Wednesday evenings at 6:15, sponsored by the Territorial Medical Association.

A.M.A. movies were shown—Endocrine Diseases with Characteristic Physiognomy.

Mr. Neil Ifversen was the first speaker of the evening. He told of the plans and problems of H.M.S.A.

Nathan Sinai, Ph.D., head of the Medical Economics Department, School of Public Health, University of Michigan, lectured on changing issues in medical economics.

The meeting was concluded with refreshments and a social hour.

SAMUEL L. YEE, M.D.
Recording Secretary

HAWAII COUNTY MEDICAL SOCIETY

The 250th regular monthly meeting of the Hawaii County Medical Society was called to order by Dr. W. M. Seymour at 7:30 p.m. May 11, 1946 in the Dining Room of the Hilo Hotel. Twenty-two members, 1 guest and 2 visitors were present.

Dr. T. Yoshina, acting secretary, read a communication from the Hawaii Medical Service Association informing the Society that the Hawaiian Cane Products has a medical service plan almost identical to the H.M.S.A., yet is not a member of the Hawaii Medical Service Association.

In the seismic waves of April 1, our Society not only lost the records of the secretary but also the services of our secretary, Dr. W. M. Bond, who is now bedridden. Dr. T. Yoshina was elected to fill the vacancy.

Dr. Chauncey D. Leake of Texas Medical School delivered his second address of the day. His first lecture, "General Principles of Pharmacology" was given at 3 p.m. at the Hilo Memorial Hospital Staff Room. In his evening address Dr. Leake discussed antiseptics, recent advances in chemotherapy, drugs affecting the central nervous system, and (by request from the floor) Bogomolets' work on the reticuloendothelial system. Many questions were asked and much discussion followed. It was a most stimulating day for everyone.

* * *

The 251st regular monthly meeting of the Hawaii County Medical Society was called to order by Dr. W. Seymour in the Staff Room of the Hilo Memorial Hospital at 7:25 p.m., June 6, 1946. Fourteen members and one guest were present.

Scientific Session: Dr. R. P. Wipperman gave a resume of his post-graduate studies in the University of California Hospital and San Francisco and in the Grady Memorial Hospital under the direction of Emory University in Atlanta. Among the topics discussed were: treatment of cancer of uterus, Rh factors, effect of rubella during pregnancy on the fetus; caudal anesthesia and the use of demerol for labor, forceps, management of eclampsia, treatment of syphilis during pregnancy, pelvic inflammatory disease, vaginal hysterectomy and report of a few unusual cases.

Correspondence: Dr. I. V. Larsen's letter of resignation from the membership of the Board of Censors was read. He requested that he be retained in the membership of the society during his absence on the mainland for post-graduate work.

A letter from Mr. Gouveia of the Tuberculosis Society of Hawaii informing us of the lack of bed space to care for the large waiting list of tuberculosis patients at Puumaile Hospital was elaborated on by Dr. W. Leslie. The secretary was instructed to write to Dr. C. L. Wilbar, Jr., President of the Territorial Board of Health, stating that the Hawaii County Medical Society, like the rest of the civic organizations, is anxious to see the deplorable lack of facilities for the care of the tuberculosis patients given immediate relief.

The applications for membership of Dr. W. M. Bond and Dr. R. S. Fillmore, Jr. were accepted. The latter is a transfer from the Honolulu County Medical Society.

Dr. R. P. Wipperman was elected to the Board of Censors, to fill the vacancy left by Dr. Larsen's resignation.

Dr. H. M. Patterson reported on the meeting of the Territorial Medical Association which was held in May in Honolulu.

It was decided that our medical society should be a member of the Hawaii Community Council and Dr. C. L. Phillips was appointed as a representative.

Dr. C. B. Brown, Chairman of Golf Tournament, announced that the Hawaii County Dental Society challenged the medics to a golf tournament.

The 252nd monthly meeting of the Hawaii County Medical Society was held in the Staff Room of the Hilo Memorial Hospital at 7:10 p.m., July 25, 1946. Seventeen members and eight visitors were present. The meeting was opened with the showing of "Dynamics of Respiration"—movies in three reels sponsored by the American Medical Association.

Mr. Wulff, local administrator of the Veterans Administration was called upon to introduce the guest speaker, Dr. M. T. Sax, Chief Medical Officer for the Veterans Administration in Hawaii. Dr. Sax was specially invited to speak on the medical care of veterans.

He stated that a plan is under consideration in

Washington whereby physicians on the Islands may work through the Hawaii Medical Service Association in dealing with the Veterans Administration. Whether this will come to pass or not, Dr. Sax was unable to state at this time. He discussed chiefly the hospital and office care of veterans.

Who Are Eligible: Any wartime veteran with honorable service or peace-time veterans, discharged for physical disability adjudicated incurred while in the service. The physicians are to determine the need for the hospital care and the representative of the Veterans Administration is to determine eligibility.

Who Can Treat: Any physician designated by the Veterans Administration may treat at schedule of fee in force at the time. Any member of the medical society who wishes to participate is eligible provided that he has applied for and has been approved by the Veterans Administration in Honolulu.

Hospitals: Veterans are treated in Veterans Administration contract hospitals on the Big Island, which are Hilo Memorial Hospital, Kohala Hospital, Kona Hospital and Puumaile Hospital.

The outpatient service is available to veterans only for disability adjudicated service-incurred or aggravated. Eligibility is determined by the adjudication service.

In case of an emergency such as an appendectomy or pneumonia, physicians were advised to inform the patients that, in case of nonauthorization, they are responsible for the medical care. In making request for authorization the doctors should list all the services that appear necessary, such as surgical care, assistant's help, anesthesia, special drugs such as penicillin or insulin, etc., to be eligible for payment. The request for authorization must be in the hands of the chief medical officer in Honolulu within the first 5 days. If additional services are needed requests for authorization must be made from time to time as need arises. It was pointed out that most of the difficulties arose when a bill was sent for non-requested items or requests were made long after the 5 day period.

Teruo Yoshina, M.D.
Secretary

PSYCHIATRIC COMMENT

FUNCTIONS OF A PSYCHIATRIC SOCIAL WORKER

Psychiatric social work stands today as a specialized field with a developing body of knowledge and skill that is forming the basis of specialized training. It represents social work practice in connection with psychiatry and mental hygiene—in organizations that have as their primary purpose the study, treatment, and prevention of mental and nervous disorders.

For the case worker, an understanding of human behavior is even more nearly indispensable than it is for the doctor, because she has no intermediary channels of treatment like the doctor but has to carry on by means of a person-to-person relationship. She has little or no equivalent of the doctor's prescription, injection needle, operation, shock therapy or pentothal interviews. For these reasons, the psychiatric case worker in her training comes earlier than the medical student into direct contact with the patient. By means of her training, the case worker acquires a technique which is in part peculiar to her profession, but also has many features which are common to other professions such as the practice of medicine.

Psychiatric social work began in mental hospitals. Boston Psychopathic Hospital in 1913 established the first Social Service Department. The doctors had become aware of the fact that many patients could have been helped to get well more quickly and could have been protected from relapses if there had been better understanding of, and help given in, the area of their daily life and living relationships. However, the psychiatrist did not have time to develop this approach nor did he have time to get adequate social histories to better understand the patients' illnesses. Thus, the psychiatric social worker became the means for extending the services of the psychiatrists.

It might be well to review briefly how one qualifies for a position as a psychiatric social worker. Besides graduating from an accredited college, she has two years of professional training in an accredited graduate school of social work, giving a Master's degree. Usually the training includes from nine to eighteen months of supervised experience, some of which is in a family and children's agency, and a longer period in a psychiatric clinic for adults or children. Besides case work, courses in the graduate school include medical information, community organization, economics, sociology, government, child welfare, nature of human behavior, psychology, social psychiatry, advanced psychiatry, psychopathology, and clinical demonstration in a mental hospital.

As a member of a staff made up of a psychiatrist, a social worker, a psychiatric nurse, and sometimes a psychologist, the psychiatric social worker is concerned with treatment of the patient's social situation. In general, her task involves a five-fold function.

1. She analyzes the patient's social situation in relation to his present difficulty; such analysis is based upon a study of conditions in his home, family and neighborhood, and his attitude toward them, and this is utilized with the psychiatric, physical, and psychological findings, in diagnosis and treatment.

To understand a mental illness, one must know the environment (past and present) of the individual and his reactions to it, for these stresses have usually played an important part in the patient's breakdown. The patient's relationships within the family, both current and earlier, as well as his social relationships, are especially important.

In many hospitals, the social worker secures the patient's history. In others, the physician takes the history of a patient from relatives when they visit the hospital, the social worker, when indicated, supplying additional data from other informants in the community. There is much to be said regarding the advisability of having the social worker take the complete history; however, if the social service staff is limited, as it is in most hospitals, it would not seem wise for the social worker to take the history of each new patient admitted. On the other hand, the contact made with relatives through the taking of the history is often of advantage to the social worker, especially when there are obvious problems to which she should direct her attention, and might later be asked to manipulate.

2. She interprets to the family the patient's problem and the recommendations made by the psychiatrist, always keeping in close touch with changing conditions in the home and family life which may cause an adaptation in plans.

3. She aids the patient and family to work out

a program for more adequate social adjustment, working closely with the psychiatrist as treatment progresses. This may include securing the cooperation of outside agencies, and use of any of the community resources necessary to aid the particular individual or family unit.

4. She interprets the diagnosis and plans for treatment to her co-workers or to members of other social agencies who may also be interested in the patient and his family. These functions are not distinct but interwoven. Also, in a total working relationship with patient, family, and psychiatrist, the extent at which the psychiatric social worker carries responsibility for any or all of these activities is not governed by any routine or set limitations. Rather the whole procedure varies according to the needs of the individual case.

All functions of the social worker should be planned in close cooperation with the medical staff and should supplement the work of the Resident Physician, Chief of Service, or Private Doctor, and the Admitting Nurse or Nurse in Charge of the Ward.

5. When a patient has been admitted to a mental institution or mental ward in a general hospital, an interview with the social worker, who can listen to his difficulties, explain the reasons for certain institutional procedure, and plan measures which will alleviate some of his worries concerning his affairs outside the hospital, adds much to his comfort and satisfactory adjustment.

Miss Hester Crutcher, Director of Social Work Department of Mental Hygiene of New York State, has summed up the function of the psychiatric social worker in her work with hospital patients as "the understanding handling of the social factors which seem to have contributed to the patient's illness. . . . With relief from certain pressures the patient can often live comfortably in the community. The social worker should be able to make the adjustments required to relieve such strain. . . . The social case work which the well-trained worker is able to do now is a far cry from the errands and special investigations which formerly constituted her chief job."

The part played by the social worker in the program for treatment of patients in a hospital for mental disease is a developing one, bound up with the interrelationship of psychiatry and social work; it is a subject for continuous study.

(Mrs.) Virginia S. Williamson,
Sr. Psychiatric Social Worker
Social Service Department
Queen's Hospital

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NOTES AND NEWS

PERSONALS

The Queen's Hospital has recently added the following new internes: Dr. Charles S. Judd, of Yale University Medical School; Dr. Francis Y. K. Lau, of the College of Medical Evangelists; Dr. Robert J. Potts, of the University of Buffalo; Dr. Lyle H. Prenzler, of the University of Illinois. Dr. John H. Manwaring, of Stanford University, has become the resident in pathology. Dr. James Cherry will be the next resident in surgery, after completion of his internship at Queen's.

St. Francis Hospital now has several new house doctors as follows: Dr. Edward Matsuoka, a graduate of the Medical College of Virginia in 1941. He served in the Army for three years. Dr. Richard You, brother of Dr. E. Wonsik You, of Honolulu, a graduate of Creighton University in 1943, recently discharged as a Captain from the Army after two years of service. Dr. Thomas Min, a graduate of Jefferson Medical College in 1942. He was discharged as a Captain from the Army, after three years service in the European Theatre.

The Kapiolani Maternity & Gynecological Hospital has secured the services of two residents, as follows: Dr. Lyle Bachman, a graduate of Rush Medical College in 1941, followed by interneship in Chicago and residencies in obstetrics and gynecology in St. Louis and New Orleans for four years; and Dr. Robert P. Jay, a graduate of Indiana University Medical School in 1944, serving his interneship and residency in obstetrics at Methodist Hospital, Indianapolis. Following this he has been in the Navy, continuing obstetrical practice.

Dr. E. A. Stephens, medical director of the Territorial Hospital, Kaneohe, has resigned and is replaced by Dr. Marcus Guensberg. Dr. Stephens plans to enter the private practice of psychiatry in Honolulu soon.

Dr. F. J. Halford, of Honolulu, delivered a paper at the American Society for the Study of Sterility meeting in San Francisco, in July, as well as being delegate to the AMA meeting.

Dr. and Mrs. (Dr. Tai Heong Kong) K. R. Li, of Honolulu, celebrated their Golden Wedding Anniversary with an open house on July 14th. This date also was the cause for celebration of fifty years of medical practice in Hawaii for each of the couple as well as their seventy-first birthdays. The Journal extends its heartiest congratulations for this memorable occasion.

Dr. Robert B. Faus, of Honolulu, has been named head of the Medical Advisory Committee of the Convalescent Nursing Home and also has been appointed staff surgeon to the Hawaii National Guard with the rank of Colonel. He and "Dr. Marie" recently celebrated their twenty-fifth wedding anniversary as well as twenty-five years of practice in Hawaii.

Local physicians who have recently successfully passed their examinations for certification as specialists by the American Boards are Dr. Louise S. Childs in Pediatrics, Dr. C. M. Burgess in Surgery, Dr. E. R. Austin in Otolaryngology, and Dr. I. L. Tilden in Pathology.

Dr. John M. Felix was honorably discharged from the Navy as a Lieutenant (j.g.) and has opened his offices in Honolulu for the practice of medicine and surgery.

Dr. Edward K. Lau, formerly a Major in the Army Medical Corps, has returned to his former practice with the Chock and Pang Clinic.

Dr. John A. Burden, formerly of Puunene, Maui, is being discharged from the Army Intelligence Unit as a Colonel, after five years of distinguished service in the South Pacific and Far East.

Dr. Robert F. Bailey has returned from active duty with the Navy and has resumed his practice in association with Drs. Culpepper and Honl.

Presently taking trips on the mainland are Drs. Edgar S. Childs, S. C. Culpepper, Shoyei Yamauchi and Robert Benson.

Dr. Paul Withington is now on terminal leave as Captain, Medical Corps, USNR, and has resumed his private practice at the Dillingham Building. Dr. Withington served as assistant district medical officer in the 14th naval district.

The Hawaii Chapter of the American College of Surgeons held a scientific session at the Mabel Smyth Building, August 21. Speakers were Dr. K. B. Conger, who spoke on the technique of trans-urethral prostatic resection; Dr. H. M. Chandler, who presented two cases of unusual fistulas of the umbilicus; Dr. Kwan Heen Ho, who described the various aspects of surgery under war-time conditions in the Burma Campaign; and Dr. Laurence M. Wiig, who discussed post-

operative thrombosis and embolism with particular reference to the value of early ambulation.

Dr. and Mrs. Hen Yung Ing celebrated their twenty-fifth wedding anniversary on August 21st, with a Chinese banquet.

Dr. Frank C. Spencer, of Honolulu, is taking nine months graduate study in New York, specializing in obstetrics and gynecology.

Dr. Verne Charles Waite, formerly in the USPHS in Hawaii, is now associated with The Clinic in their surgical department.

Dr. Isami Umaki has become associated with Dr. Richard Sakimoto in Honolulu, in the practice of obstetrics and gynecology. Dr. Umaki previously was located on Kauai.

Dr. Clarence E. Fronk, of Honolulu, has not yet returned any specimens from his safari into Africa, although some may be forthcoming, photographically or otherwise.

Returning from a combined air and sea trip to Shanghai, Dr. F. D. Nance of the Medical Group reports that inflation extends to the practice of medicine as well as all other forms of endeavor in China. Deliveries are costing patients $500 (U. S.), office calls $15, house calls $25. Despite this, doctors are no better off than they were before, as the price of living has risen as much or more than their fees. Foreign medical practitioners are practicing at present under temporary permits, no permanent examining and licensing system having yet been established. It is reported that when this is done, it will probably include oral or written examinations, or both, in Chinese. The health conditions in China show some improvements and some deterioration over their previous status. Improvements are shown in a rather general appreciation of the role of the fly in spreading disease and DDT is sold at every corner. The public health services and garbage disposal, now under exclusively Chinese management, have lost much in efficiency.

Dr. Ralph S. Steffe, formerly resident in obstetrics at Kapiolani Hospital, was discharged from the Navy with the rank of Lieutenant Commander last December. He spent most of this year in the Department of Obstetrics at the University Hospital in Ann Arbor, Michigan, where he had previously taken his hospital training. He returned to Honolulu September 4 to join the department of obstetrics at The Clinic.

Dr. H. E. Bowles returned September 4 from a three months trip to the Mainland, where he visited relatives and made a number of professional contacts.

Dr. Carl M. Mirikitani was married on July 20 to Miss Hisa Yoshimura, a graduate of the Oberlin Conservatory of Music in Ohio.

Members of the Hawaii County Medical Society recently held a golf tournament in which they were opposed by the Hawaii County Dental Society. The physicians are evidently tending to their work, as they came off second best in the match.

Dr. Tell Nelson, until recently a resident physician at Kula Sanatorium, Maui, has opened an office in Honolulu for the practice of allergy.

The Territorial Selective Service Board awarded Selective Service Medals and Certificates of Merit for uncompensated service to Drs. Henry C. Akina, Harry Arnold, Arthur C. Davis, L. A. R. Gaspar, Jr., Henry C. Gotshalk, Rogers Lee Hill, L. A. Honl, Mitsuharu Hoshino, Richard D. Kepner, Raymond F. Kong, Fred K. Lam, Joseph W. Lam, Martin H. Lichter, Merton H. Mack, A. V. Molyneux, Walter M. Ozawa, Jesse W. Smith and Goonzo Yamashita. Governor Stainback made the presentations at Iolani Palace. On the other islands the following were similarly recognized: Hawaii: Drs. W. S. Loo, Haruto Okada, Archie Orenstein, Harold M. Patterson, W. J. Seymour and L. P. Sorenson. Maui: Drs. William T. Dunn, Frank S. Lee, R. J. McArthur, John Sanders, Lewis E. Shapiro and F. A. St. Sure, Jr. Kauai: Drs. M. A. Brennecke, J. M. Kuhns, L. L. Patterson, David Tsuneshiro and Isami Umaki. Molokai: Drs. Raymond T. Eklund, Hawley H. Seiler and Norman R. Sloan. Lanai: Dr. William H. Wilkinson.

Dr. Samuel Allison, of the Board of Health, was awarded first prize in the short story section of the American Association of Literary Physicians at the recent meeting in San Francisco of the American Medical Association. The title of his prize-winning story is "I Confess."

HEALTH DEPARTMENT NEWS

Dr. Theresa Woo, formerly a captain in the medical corps of the army, was recently appointed pediatrician with the bureau of maternal and child health of the board of health. She replaces Dr. Martha W. Groves, nee Dr. Martha C. Wager, who resigned in June.

Dr. Woo received her M.D. degree from the University of Michigan and interned at the Hospital of the Woman's Medical College of Pennsylvania. She received her pediatric training at the Children's Memorial Hospital in Chicago, Babies

Hospital in New York, and the Harriet Lane Home of the Johns Hopkins Hospital, Baltimore.

A naturalized citizen of the United States, Dr. Woo had her high school training in Tientsin and also was an assistant in pediatrics at Peiping Union Medical College in China.

Dr. Robert H. Marks, director of the tuberculosis bureau of the board of health, returned from the tuberculosis convention in Buffalo last month. Besides attending the medical section meetings, Dr. Marks visited Dr. Herman E. Hilleboe of the U. S. Public Health Service, who is expected to come to the Territory in October. Dr. Marks also stated that the new mobile X-ray unit purchased by the Tuberculosis Association will be delivered here sometime in September from the Westinghouse factory in Maryland.

Dr. Ralph Beddow, veterinarian, has resigned his position with the Bureau of Pure Food and Drugs in the Board of Health and is entering the University of Oregon Medical School.

Dr. Richard K. C. Lee returned September 18th after spending one year in graduate study in dermatology and syphilology at the New York Post-Graduate Medical School.

MISCELLANEOUS

Physicians who are literarily inclined are being asked to join the organization of Physicians Literary Guild, which is now being organized. The object of this Guild is to stimulate physicians to continue their interest in letters, essays, biographies, poems or plays and submit them to the Guild for judging and prizes annually. Expert writers and novice writers alike are invited to join. Further information may be obtained from F. H. Redewill, M.D., Suite 521-536 Flood Bldg., San Francisco 2.

TWENTY-FIFTH ANNIVERSARY OF THE DISCOVERY OF INSULIN

The twenty-fifth anniversary of the discovery of insulin will be observed with a program in Convocation Hall, at the University of Toronto, on September 16. Many internationally known figures in the field of medicine will be present to honor the occasion. Among them will be R. D. Lawrence, physician in charge, Diabetic Clinic, Kings College Hospital, London, England; H. C. Hagedorn, of Gentofte, Denmark; Bernardo A. Houssay, Research Institute of Experimental Biology and Medicine, Buenos Aires, Argentina; and Elliott P. Joslin, Harvard Medical School, Boston, U. S. A. This observation will be followed by the regular annual meeting of the American Diabetes Association.

On September 23 Eli Lilly and Company will sponsor an international diabetes clinic to be held at the Indiana University Medical Center in Herty Hall of the State Board of Health Building, Indianapolis, Indiana. International importance will be given to this meeting by the presence of Professor Charles H. Best, Toronto, Canada, co-discoverer with Banting of insulin, Professor Houssay, Dr. Lawrence, and Dr. Hagedorn. They will discuss various phases of diabetic care.

BOOK REVIEWS

The Quarterly Review of Pediatrics, a quarterly publication, appearing for the first time February, 1946, has been added to the Honolulu County Medical Library.

This journal has an excellent editorial board and is a resumé of the current literature in pediatrics and allied subjects. It contains brief but adequate abstracts of the more important articles and references to other pertinent ones.

The subject matter is well arranged and easily digested. Reference work is made simple by good indices.

It is an excellent source of information for the busy general practitioner as well as the pediatrician, who finds that the field is becoming ever broader and more difficult to cover and keep abreast of.

It has been said that it may be a duplication of "The Year Book of Pediatrics." This I disagree with for several reasons. Appearing quarterly, it is more up-to-date and it comes in smaller doses. I also find it more readable and that the editorial attitude is more critical in dealing with the subject matter. This latter point is very important to the average physician, who needs a more critical attitude toward the average publication.

I feel that the "Quarterly Review" is a distinct addition to our library, and one which will be advantageously used by the Society.

D. C. Marshall, M.D.

New and Nonofficial Remedies, 1946. Issued by the Council on Pharmacy and Chemistry of the American Medical Association.

This valuable handbook has again been brought up to date and is available for the use of all practicing physicians. With each year the value of this book increases so that no physician who wishes to keep his therapeutics up to date can afford to be without ready access to the material contained therein.

CALLING ATTENTION TO

Items of possible interest to friends of Chauncey D. Leake

July, 1946

1. Light Summer Reading: With undue fanfare appears A. A. Bogomolets' *The Prolongation of Life* (Duell, Sloan & Pearce, N. Y., '46, $1.50). H. Cramer reviews *Mathematical Methods of Statistics* (Princeton, '46, 570 pp., $6.00). Commonwealth Fund issues Studies of N. Y. Academy of Medicine Committee on Medicine and the Changing Order, including B. J. Stern's *Medical Services by Government—Local, State and Federal* (N. Y., '46, 226 pp., $1.50). D. M. Matthews discusses *The Surgery of Repair: Injuries and Burns* (C. C. Thomas, Springfield, Ill., '46, 400 pp., $10.00). E. Urbach offers *Skin Diseases. Nutrition and Metabolism* (Grune and Stratton, N. Y., '46, 750 pp., $10.00). L. G. Lowry's *Psychiatry for Social Workers* is well suited, bibliography and all, for medical students and general practitioners (Columbia Univ. Press, N. Y., '46, 337 pp., $3.50). Mrs. M. L. Duran-Reynals dekruifs over *The Fever Bark Tree: The Pageant of Quinine* (Blakiston, Phila., '46, $2.80). J. S. Lawrence neatly summarizes *The Sulphonamides in Theory and Practice* (H. K. Lewis, London, '46, 125 pp., 9s). E. T. Engle edits Proceedings of Fertility Conference: *Diagnosis in Sterility* (C. C. Thomas, Springfield, Ill., '46, 237 pp., $5.00). C. E. ZoBell monographs wisely on *Marine Microbiology* (Chronica Botanica, Waltham, Mass., '46, 255 pp., $5.00). L. J. Soffer well reviews *Diseases of the Adrenals* (Lea and Febiger, Phila., '46, 304 pp., $5.50). L. Thorndike laboriously edits *The Herbal of Rufinus* (Univ. Chicago Press, '46, 476 pp., $5.00). L. Dexter translates revises E. Braun-Mendez & Company's *Renal Hypertension* (C. C. Thomas, Springfield, Ill., '46, 493 pp., $6.50). E. T. Bell surveys *Renal Diseases* (Lea and Febiger, Phila., '46, 434 pp., $7.00). E. E. Robinson offers provocative essays in *The New United States* (Stanford Press, '46, 141 pp., $2.50). Then M. J. Ward conjures up *The Snake Pit,* with shock therapy (Random House, N. Y., 278 pp., $2.75).

2. Symposia and Reviews: Note excellent symposium on diabetes, with C. H. Best on fat transport, H. O. Mosenthal on blood sugar tests, J. P. Peters on use of carbohydrates, and I. A. Mirsky on etiology (*Am. J. Digest Dis.* 13: 127-170, May, '46). A. O. Whipple, G. J. Heuer & Co. contribute to symposium on cholecystitis (*Bull. N. Y. Acad. Med.* 22: 281-319, '46). C. A. Doan well reviews pan-marrow hematopoiesis and splenic hematopenia in Kretschmer Lecture (*Proc. Inst. Med. Chicago* 16: 178, '46). Timely is C. M. Child's review of organizers in development and the organizer concept (*Physiol. Zool.* 19: 89-148, '46). K. H. Beyer reviews biochemorphology of sympathomimetic amines (*Physiol. Rev.* 2: 169, '46). H. G. Wood summarizes hot stuff on carbon dioxide fixation and tricarboxylic acid cycle (*Ibid* p. 198). F. A. Fuhrman collects data on effect of body temperature on drug action (*Ibid* p. 247). S. J. Thannhauser and G. Schmidt review lipins and lipidoses (*Ibid* p. 275). R. St. A. Heathcote offers full review on pharmacology and therapeutic uses of diamidines (*J. Trop. Med. Hyg.* 49: 8, 33, '46).

3. Cancer: H. B. Andrevont appropriately gives 1st E. A. Allen Lecture on the mammary tumor agent and its implications in cancer research (*Yale J. Biol. Med.* 18: 333, '46). R. G. Green & Co. reports that the milk agent of mouse mammary cancer dies out on serial transmission (*Proc. Soc. Exp. Biol. Med.* 61: 362, '46). E. L. Howes well discusses regeneration patterns in skin injury from carcinogens and finds no evidence for direct stimulation to tumor formation (*Cancer Res.* 6: 298, '46). E. Boyland shows tumor inhibition by diamino diphenyl ethers and sulfamino quinolines (*Biochem. J.* 40: 55, '46).

4. Etc.: R. and H. Croxatto (Santiago, Chile) find hypertensinase activity of plasma related to aminopeptidase (*Proc. Soc. Exp. Biol. Med.* 61: 330, '46). D. Scherf claims control of anginal attacks due to rheumatic valvular lesions with thiouracil (*Rev. Argentina Cardiol.* 12: 201, '45). H. Becks, M. E. Simpson and H. M. Evans continue studies on skeletal changes after hypophysectomy (*Anat. Rec.* 92: 109, '45) by noting dentin thickening at expense of pulp (*Arch. Path.* 41: 457, '46). A. S. Wiener & Co. report that detailed studies on inheritance of the 8 Rh blood types confirm theory of 6 chief allelic genes, and that Hr factor increases chance of accurate exclusion in disputed paternity (*Proc. Soc. Exp. Biol. Med.* 61: 382, '46)—note his remarks on pathogenesis of erythroblastosis (*Ibid* p. 390). E. L. Keeney recommends 10% sodium caprylate ointment or 20% aqueous solution for local application in moniliasis (candidosis)of skin or mucous membranes (*Bull. Johns Hopkins Hosp.* 78: 333, '46). A. Brown and A. L. Goodall find average diurnal variation in hemoglobin in healthy humans in bed to range from 0.54 gm. per 100 cc. to 0.93 (*J. Physiol.* 104: 423, '46). Our M. Fulton and S. F. Curtis contribute to the taxonomy of Rettger's and related bacteria (*Proc. Soc. Exp. Biol. Med.* 61: 334, '46). R. N. McCulloch recommends dibutyl phthalate as an effective insect repellant in control of scrub typhus (*Med. J. Austral.* 1: 717, May 25, '46).

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August, 1946

1. Anesthesia: H. Schuman announces forthcoming publication of V. Robinson's *History of Surgical Anesthesia* as part of centenary effort. American Society of Anesthesiologists announces Morton Centennial Celebration, Hotel Sheraton, Boston, October 15, 16 and 17, with obvious program. English offer excellent symposium on anesthesia, celebrating the centenary (*Brit. Med. Bull.* 4: 81-155, '46) with experimental notes on local anesthetics and blood pressure by J. H. Burn, on morphine substitutes by E. C. Dodds, on atropine substitutes by H. R. Ing; clinical notes on trichlorethylene and curare by C. L. Hewer, and historical notes, with British bias by B. M. Duncum, G. S. W. Organe and A. C. King. C. C. Scott and K. K. Chen confirm high analgesic power of new diphenyl butanone compds. (*J. Pharmacol. Exp. Therap.* 87: 63, '46). J. Stalport offers review of medicated aerosols (*Arch. Internat. Pharmaco.* 71: 248, '45). S. Krop notes local anesthetic action of pyridium (*Anesth. and Analg.* 25: 110, '46). R. K. Richars and K. E. Kueter report on competitive drug effects referring to PABA and procaine convulsions (*J. Pharmacol. Exp. Therap.* 87: 42, '46). S. E. Sulkin & Co. suggests general anesthesia in therapy or neurotropic virus infections (*Science* 104: 53, July 19, 1946).

2. Biochemorphology: Biochemorphic character of war research in pharmacology well shown by recent reports: A. Gilman on therapeutic applications of chemi-

cal warfare agents, including 2, 3-dimercaptopropanol (BAL, British Anti-Lewisite) for heavy metal poisoning, Di-isopropyl fluorophosphate (DFP) as an anticholinesterase, of possible use in myasthenia gravis and glaucoma, and nitrogen mustards as anti tumor agents (*Fed. Proc.* 5: 285, '46); F. S. Philips on insecticides and rodenticides, including DDT, hexachlorcyclohexane ("666"), dimethyl phthalate, alphanaphthyl thiourea (ANTU) and Na fluoroacetate (*Ibid* 292); E. K. Marshall on chemotherapy of malaria, including the 8-amino quinolines, such as SN 13, 276 (8-5-isopropylamino-anylamino-6-methoxy-quinoline) which is highly curative with low toxicity, and H. Molitor on bacterial chemotherapy (*Ibid* 298, 304). W. H. Powers edits Vol. II of Wayne lecture series on Advancing Fronts in Chemistry, entitled *Chemotherapy,* with articles on chemotherapy of Tb by W. H. Feldman, on synthetic antispasmodics by F. F. Blicke, on sulfa drugs by E. H. Northey, on antimalarials by H. S. Mosher, on organometallic chemotherapeutic agents by C. K. Banks, and on chemotherapy of parasitic diseases by W. H. Wright (Reinhold, N. Y., 156 pp., $3.25, 1946). R. B. Angier and large Co. synthesize liver L. casei hematopoietic factor as pteroylglutamic acid (*Science* 103: 667, May 31, '46). S. Friedlaender & Co. find pyribenzamine etter antihistaminic cmpd. than benadryl (*Proc. Soc. Exp. Biol. Med.* 62: 65, '46). T. D. Spies & Co. report on antipernicious anemia effects of thymine, which is 5-methyl uracil, so why not get after other alkyl derivatives? (*J. Lab. Clin. Med.* 31: 643, '46; *Blood* 1: 185, '46).

3. Books: Tough going but worth it is F. S. C. Northrop's *Meeting of East and West: An Inquiry Concerning World Understanding* (Macmillan, N. Y., '46, 531 pp., $6.00). Helpful and stimulating is D. E. Green's *Currents in Biochemical Research* with chapters by 31 leaders (Interscience Publ., N. Y. 3, '46, 500 pp., $5.00). J. R. Newman and B. Russell newly edit K. Pearson's edition of W. K. Clifford's *The Common Sense of the Exact Sciences,* first published in 1885 (Knopf, N. Y. 22, '46, $4.00). R. G. Hoskins offers *The Biology of Schizophrenia* (Norton, N. Y. 11, '46, $2.75). H. F. Brandt discusses *The Psychology of Seeing* (Philosophical Lib., N. Y. 16, '46, $3.75). L. Meriam gives pertinent analysis of Relief and Social Security (Brookings Inst., Washington, '46, $5.00). H. Haymaker and B. Woodhall issue well illustrated *Peripheral Nerve Injuries* (Saunders, Phila., '46, 227 pp., $4.50). S. Soskin and R. Levine offer *Carbohydrate Metabolism: Correlation of Physiological. Biochemical and Clinical Aspects* (Univ. Chicago Press, '46, 315 pp., $6.00).

4. Noteworthy: G. Roskin (Moscow) discusses toxin therapy of experimental cancer, referring to influence of protozoan infections, e.g., trypanosoma cruzei, on cancer (*Cancer Res.* 6: 363, '46). E. Asmussen and O. Boje show that high temperature in working organism facilitates the performance of work (*Acta Physiol. Scand.* 10: 1, '45—now almost entirely in English). W. C. Alvare: discourses on cerebral arteriosclerosis with small unrecognized apoplexies (*Geriatrics* 1: 189, '46). P. B. Prince and T. F. Lee report interesting experiments on gastric digestion of living tissue (*SGO* 83: 61, '46). R. H. Silber and I. Clark show that withholding food after oral administration of sulfa drugs increases blood concentration by decreasing fecal loss (*Arch. Biochem.* 10: 9, '46). E. A. Fennel & Co. describe effects of penicillin on bacterial morphology (Hawaii Med. J. 5: 257, 259, '46). H. B. Stein doubts value of erythrocyte sedimentation rate as diagnostic aid in jaundice (*S. Afr. J. Med. Sci.* 11: 34, '46). Our J. D. Weaver discusses psychotherapeutic effects of estrogenic hormones (*South Med. J.* 39: 581, '46). Our M. Pollard & Co. continue experiments on Bullis fever (*Am. J. Trop. Med.* 26: 175, '46).

IN MEMORIAM

JAMES H. RAYMOND, M.D.

August 8, 1946



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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

Bulletin Committee

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BETSY BOYLIN, R.N., Maui

COMMITTEE ACTIVITIES OF THE TERRITORIAL NURSES' ASSOCIATION 1946 - 1947

Industry is not alone in facing the problems of reconversion to peacetime needs. Reconversion has struck the Nurses' Association of Hawaii also. The war can no longer be a legitimate excuse for postponing the facing of problems both new and of long standing. The most urgent problems are as follows:

1. The development of a self-sustaining nurse placement service.
2. A means of financing the *Inter-Island Bulletin.*
3. Provision for adequate executive personnel for the Board of Registration and the Territorial Nurses' Association.
4. Revision of the by-laws to provide a clear cut direction as to organization.
5. Recruitment of students for schools of nursing.
6. Development of training facilities for practical nurses.
7. Study and revision of the Margaret Jones Memorial Fund policies and provisions.
8. Study of working conditions for nurses.

These problems will involve all of the Standing Committees of the Association and some appointed for a special purpose. They call for straight thinking on the part of officers and committee personnel and an intensive program of keeping the entire membership informed of snags as well as progress. The program requires organized, unified effort if achievement is to be gained.

To coordinate all committee activities and to make information about their progress generally available, the Service Committee has been revived and dusted off and given a most important job. This Commitee consists of the officers of the Association and one representative of the membership at large. Recommendations of the Board of Directors will be received by the Committee and the activities necessitated by such recommendations will be assigned to the appropriate committees. Similarly, recommendations made by the committees to the Board of Directors will be transmitted through the Service Committee. It is hoped that this will avoid duplications and gaps in committee activities and afford a means of securing for each committee the help and support it needs to accomplish its purposes. To facilitate the fulfillment of the Committee's responsibilities the following plan has been set up:

1. Each committee will make a written report at two month intervals through the Secretary. The first reports will be due September 1, 1946.
2. Committees will include in this report recommendations to be transmitted to the Board of Directors or appropriate committee.
3. The Service Committee will make assignments to the appropriate committee in accordance with action of the Board of Directors.
4. From the bi-monthly reports, the Service Committee will select and prepare progress reports for the County Associations.
5. Suitable material from the reports will be given to the Information and Publicity Committee for general publicity purposes and to the Bulletin Committee for publication.
6. The Service Committee will secure a consultant to work with each committee as needed. This may be the previous chairman, or a member of the Service Committee or Board of Directors who is familiar with the activities of the particular committee she is advising.

Some committees are already working on problems assigned to them. Others have heavy jobs ahead.

Legislative Committee: The work of this committee is more or less seasonal. However, one of its duties is to keep the membership aware of and actively interested in any Federal Legislation affecting nurses. Right now there are bills of such import before Congress. Digests and comments on such information should go in the report to the Service Committee. In preparation for the Legislature when it meets there are several matters of

vital interest to the Association that require Committee study. (1) Appropriation for personnel for the Board of Registration; (2) Subsidization of schools of nursing; (3) Possible support for the Nursing Service Bureau. If possible this committee should obtain copies of all bills concerning nurses and nursing and file them in the Mabel Smyth Library.

Information and Publicity Committee: Mrs. Myrtle Schattenburg, Chairman. This committee has been given the responsibility of preparing a pamphlet for recruitment purposes for use in high schools. This will be worked out in cooperation with the Department of Public Instruction and the Education Committee.

Education Committee: Janice Mickey, Chairman. The Education Committee has been asked to keep an up-to-date file of information regarding educational opportunities in nursing available in the Mabel Smyth Library. This committee is also charged with preparing material for the guidance of nurses in each County Association who have been asked to assume the task of being a source of information about nursing as a vocation, opportunities for preparation for nursing, and for individual counselling service to girls interested in choosing nursing as a career. The Education Committee will also be interested in and take an active part in implementing the recommendations which will result from the survey of schools of nursing to be made under the auspices of the Board of Registration this fall.

Margaret Jones Memorial Fund Committees: While the regular Fund Committee carries on the work involved in administering that Fund, a special committee has been appointed to study the policies governing it and to make recommendations for revisions.

Committee to Study Working Conditions for Nurses: A Territorial Committee has been appointed to receive and analyze the data which the County Associations have been asked to collect regarding hours, salaries and personnel policies in hospitals and nursing agencies in their areas.

Finance Committee: Harriet Kuwamoto, Chairman. *Bulletin Committee:* Violet Buchanan, Editor. These Committees have recommended (and the recommendation has been approved by the Board of Directors) that the amount of $500 needed to finance the *Bulletin* until January 1947 be taken from the general fund of the Territorial Nurses' Association. This was done in recognition of the fact that the publication of the *Bulletin* in the HAWAII MEDICAL JOURNAL offers too many advantages to allow it to drop. The Bulletin Committee will endeavor to work out a plan to finance the project by other means.

Revisions and Membership Committee: Phyllis Hubbard Cox, Chairman. This Committee will submit recommended changes in the by-laws to the County Associations soon. Following the acceptance of revisions a re-organization of committees may be necessary.

Nursing Service Bureau Committee: Esther Stubblefield, Chairman. The old problem of adequately financing the Nursing Service Bureau is still with us. There are several possibilities which may work out so that an adequate placement and counselling service may be provided.

Board of Registration: Albertine T. Sinclair, Chairman. The Nurse Practice Act, revised in 1945, provides for licensing and registration of practical nurses and for accreditation of schools of nursing. By July 1, 1946, licensing of practical nurses will be started. You will soon receive the regulations regarding requirements and procedures. Your help in interpreting the regulations to persons who are affected by the provisions of the law is needed.

Arrangements are under way for a survey of schools of nursing by a mainland nurse suggested by the National League of Nursing Education, the results of which will be used as a basis for accreditation by the Territorial Board of Registration.

Library Committee: Dorothy Blank, Chairman. This Committee has carried on its work of adding to and maintaining reference material, reports, etc., of interest to nurses, in the Mabel Smyth Memorial Building Library. It has added a collection of information regarding local and mainland opportunities for nurses' training and postgraduate work for the use of prospective nursing students.

Effort will be made to keep all Associations informed of the progress of the committees and of new problems and projects when they occur.

VIRGINIA A. JONES, President
Nurses' Association, Territory of Hawaii

June 1946

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The Revised Nurse Practice Act

The revised nurse practice act of 1945 for the Territory of Hawaii requires that every person who cares for the sick for hire must be licensed and must re-register each year. The Board for the Licensing of Nurses, Territory of Hawaii (form-

erly called the Territorial Board of Registration of Nurses) interprets this to include any person who gives any kind of treatment or medicine for pay.

Consequently, many so-called practical nurses, orderlies and attendants must be licensed this year for the first time. The Board for Licensing of Nurses has had the responsibility of setting up requirements and procedures for licensing and initiating the program as of July 1, 1946.

According to the regulations of the Board, any practical nurse who is 18 years of age, in good health, and a U. S. citizen, may be licensed without examination if he or she has satisfactory references from two physicians and employers for whom he or she has worked, or, has been registered in a state whose standards are satisfactory.

After June 1949, however, all practical nurses to be licensed must have graduated from an approved training school course of at least nine months and must pass both written (or oral) and practical examinations given by the Board. This period will allow time for schools to be established and examination procedures to be set up.

Professional nurses are asked to aid in the program by interpreting the regulations to practical nurses and their employers and by assisting in the development of training facilities in hospitals and homes.

Since professional nurses are well aware that they cannot furnish all of the nursing care needed, they must feel responsible for providing the best care possible by trained and supervised practical nurses.

VIRGINIA A. JONES

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EDUCATIONAL OPPORTUNITIES FOR NURSES IN HAWAII

Post-Graduate Study for Nurses

NINA PURINGTON COBB*

Graduate nurses with advanced study can better fill positions of responsibility such as supervisors, directors and those responsible for nursing education or in social fields as nurses in public health, industry, psychiatry and so forth. In order to assist any nurse interested in doing post-graduate work, the opportunities for such study are summarized below and more detailed information may be obtained from the institution or group offering the course.

In the field of public health nursing, the University of Hawaii is offering two courses. One leads to a Public Health Nursing Certificate and may be taken in one year at the University. The requirements are that the applicant be a registered nurse, graduated from an accredited school of nursing and take the University aptitude test. She must present her high school record, references, and be in good physical condition. It is highly desirable that she have had college courses in psychology and sociology but these may be included in the curriculum. The other course leads to a bachelor of science degree in nursing with a major in public health nursing. This is primarily for registered nurses who have had one and a half or two years college work.

In the field of nursing administration, the University of Hawaii plans to offer a course similar to the latter one in public health nursing as noted above which will lead to a bachelor of science degree in nursing with the major in nursing administration.

In the field of tuberculosis nursing, Leahi Hospital in Honolulu has tentatively set September 1, 1946, as the opening date of their graduate course in this work. This should interest nurses in public health, industry and school nursing as well as those working directly with tuberculosis patients.

In the field of anesthesia, a six months' course is being offered at The Queen's Hospital, Honolulu. This is open to any registered nurse although it is desirable that she have a year's experience in surgery. The tuition is $150.00 with room, board and laundry furnished. Upon completion of the course the nurse is eligible for membership in the American Association of Anesthetists.

The National Foundation for Infantile Paralysis offers scholarships to nurses who wish advanced work in orthopedic or communicable disease nursing. Hawaii has no such courses and they would be taken on the mainland, but nurses of the Territory are eligible. The applicant must agree to work two years in this field upon completion of the course. Application forms may be obtained by writing to the National Headquarters of the Foundation in New York City.

For nurses considering post-graduate work, there are several pertinent questions. First, should the study be done here or on the mainland? This is an individual problem with many factors, but in general it is found that graduates of mainland schools will benefit more by doing their advanced work here, while Territorial graduates have an advantage in taking post-graduate study on the mainland. Nurses who served in the armed forces are making use of the "G.I. Bill of Rights" for further study. Schools on the mainland have been almost overwhelmed by applicants, but this has not become a problem in the Territory as yet. This

* Educational Director, The Queen's Hospital, Honolulu (resigned).

factor should be considered when deciding on the locale for study.

The problem of finance is an important one. Some organizations are willing to help their nurses and this possibility should be investigated by those considering post-graduate work. It is also difficult for a nurse to decide whether she is needed more in her present position or whether the greater contribution following advanced study will more than outweigh her absence now.

The need for nurses with education beyond the general course is apparent in positions of greater responsibility and in specialized fields. Opportunities for advanced study in public health nursing and anesthesia are available now in the Territory and will soon be available in tuberculosis nursing and nursing administration. Nurses of Hawaii are eligible for scholarships to study communicable disease and orthopedic nursing. Nurses considering advanced work should thoroughly investigate the possibilities in this field and all nurses should be informed in general of the opportunities available.

Nursing Schools

ARLENE THOMPSON*

When the revised laws regarding nursing were passed by the last regislature, the Board of Registration was given the authority to examine and approve the curricula and standards for schools and courses preparing persons for licensing. The Board was also given the authority to provide for surveys for these schools. We have no accredited training schools for nurses in Hawaii.

At present we are having correspondence with the National League of Nursing Education in New York, trying to make arrangements for a representative of that office to make a survey of our three training schools, making recommendations which will lead to the accreditation by National League. Money has been set aside for a survey and we are hoping that it will not be many months until this survey is possible.

Until this time arrives, we are working on standards for the schools using as a guide the ones set up by a special committee of the National League. At present it may be difficult for the hospitals to meet these requirements; but a time allowance will be given in which they may work to meet them, tentatively, June 1947.

Few people realize just what details are involved in making these requirements. I will mention only a few:

1. Probably after June 1947 all students will have to be high school graduates meeting the general university entrance requirements, and will have had psychological and special aptitude tests.
2. Proper housing must be provided by the hospitals including the affiliating hospital. This must include one toilet and one shower for each ten students; study table and lamp, chair, bed, dresser and wardrobe for each student.
3. Library and recreation facilities.
4. Proper supervision in the nurses' home.
5. Health programs.
6. Supervising and teaching staff with qualifications and training for the positions they hold.

In order for the Board to carry out the necessary supervision, keep the proper records, etc., the Education Committee of the Territorial Nurses' Association recommends that a full time person be hired to carry out such needs. We are immediately faced with this problem—how financially can we do this? Shall we raise the registration fee to $10.00? Should the fee for reciprocity be $10.00 also? Can we work together to get funds allotted for this purpose at the next meeting of the Legislature?

We, the nurses of the Territory, are the ones concerned. Do we want better prepared nurses? Are we going to have accredited schools of nursing properly supervised by the Board of Registration? You and I must make these decisions and then *work* for them.

Student Recruitment

HELEN GAGE*

The Post-War Planning Committee, in order to study the student nurse recruitment program, sent out questionnaires to the senior students in all of the nursing schools in Hawaii. The students were asked to consider each question carefully and to answer it truthfully. No names were signed, and a stamped self-addressed envelope was enclosed. Forty-nine questionnaires were returned. I would like to give you some interesting results of this study.

It has always been left to the nursing schools to send out recruiting agents at the twelfth grade level, yet we find that thirty-four girls became interested in nursing before the twelfth grade, and that twenty-five of these thirty-four were interested before they began high school. Who, then, is doing our recruiting?

Twenty-nine of these girls state that they were inspired by nurses. Eight of these were school nurses, nine were relatives who were nurses and twelve were public health nurses. I wonder how many of you have ever realized your great influ-

* Director of Education, Children's Hospital, Honolulu (resigned).

* Vice-President, Nurses' Association, Territory of Hawaii.

ence in the student recruitment program? Other factors which influenced these girls to enter nursing were noted. One was guided by her family physician, three of them had an invalid in the family, two were guided by their mother, one considered it her war service and one was attracted by a recruiting ad!

When asked what opportunities in nursing attracted them, thirteen expected an elevation in their social status, thirteen were interested in economic security and thirty wanted to give community service. These girls have entered a nursing school looking for not only an opportunity to give service, but to receive an elevation of their social status as a graduate registered nurse, and a living wage and economic security. It is the responsibility of our organization to see that they are not disappointed.

The girls who know the satisfaction of community service should be among our very best nurses. Let us see by whom they are being guided. Fourteen of them were Girl Scouts and four were Girl Reserves. We do not know where the other twelve received their stimulus. We have failed as an organization to actively support these agencies which give young girls an opportunity to feel the great satisfaction which comes from community service: the Girl Scouts, the Girl Reserves, the Junior Red Cross and the churches.

Twenty-one of our senior students were graduates of the NYA Hospital Attendant program and nine of them state that their NYA experience influenced them to enter nursing. One of the students had worked for a doctor and five had worked in hospitals, and gave this experience as a reason for their decision to enter nursing. Is it poor guidance that these potential student nurses were not contacted earlier, or is the "see and do" program a real recruiting tool?

Along with almost every able-bodied person in Hawaii, thirty-nine of the girls had taken a Red Cross First Aid course, but four say that this course was definitely an influence in their decision to enter nursing. Sixteen had taken the Red Cross Home Nursing course and two the Red Cross Volunteer Nurses' Aide course. Has it ever occurred to you Red Cross nurses who have volunteered to teach these courses that you are actively in the field of student nurse recruitment?

We wonder about the few; the one who entered a nursing school as a means of fulfilling her desire for travel, two who are in nursing as a result of figuratively tossing a coin to see whether they should nurse or teach, and one who came in because she was attracted by dormitory life.

Twenty-eight of the forty-nine girls were wholly financed by their families during their nursing education and sixteen earned their way partially. Four earned their own way entirely and three had to work and save money before entering. Three stated that they came into the nursing school because it was cheaper than college. Seven of the girls were worried about their families being able to support them. Our Association has funds for loans to graduate nurses for further education, but little thought has been given to these girls in the nursing school who may be worried about finances and in real difficulty.

You probably have wondered at a retired, inactive nurse presenting this portion of the program on nursing education. I hope that I have shown you the responsibility of every nurse, young and old, active or inactive, in the student recruitment program. The nursing schools cannot do this job alone. You have no choice—you are an influence in the decision of every young girl you meet to consider nursing as a career. By you, she judges nursing.

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HONOLULU CITY AND COUNTY NURSES' ASSOCIATION

Arlene Thompson, Education Director at Children's Hospital, has left for Japan to join Captain Thompson, who is stationed there. Anetta J. Bilger, R.N., B.S., has arrived from the mainland to replace her. Miss Bilger is a graduate of St. Vincent's Hospital in Portland, Oregon, and received her B.S. in Nursing Education from the University of Oregon. Before coming to Hawaii Miss Bilger was Educational Director at the Salt Lake City General Hospital.

Harriete Nelson, Loretta Schultze, Gladys Himmelsbach and Nina Cobb, Educational Director, have left the School of Nursing at Queen's Hospital. Miss Miriam L. Keller, R.N., B.A., will be the new Educational Director. She is a graduate of Mansfield General Hospital, Mansfield, Ohio, and received her B.A. Degree from the University of Michigan. Miss Keller has been Educational Director at her home school. Patricial Rocha is to join the Nursing School Staff.

HAWAII COUNTY NURSES' ASSOCIATION

The last meeting for the summer months was held on June 4 at the residence of Mrs. Patten. The following are newcomers to the Hawaii Nurses' Association: Hisae Shiraki, Kona Hospital; Eleanor Park, Puumaile Hospital; Mrs.

Elizabeth Lee Loy Stillman; June Bagley, Hilo Memorial Hospital, transferred from District 1, Iowa; Mrs. Angeline Grube, Hilo Airport nurse; Roberta Lindburg, Supervisor of Nurses, Hilo Memorial Hospital.

Mainland vacationers: Miss Josephine Hall, Kona Board of Health; Miss Mary Jean MacDonald, Board of Health; Miss Laura deShazo, Superintendent of Nurses, Pahala Hospital; Miss Annette Hammersland, Field Nurse for Hilo Sugar Company; Miss Moira Wilson, Office Nurse for Dr. L. L. Sexton.

Three nurses who have recently joined the staff of Kona Hospital include Miss Alfhild Christophersen, just returned after five years service in the Army Nurse Corps from which she was discharged with the rank of Major. In March 1944 she was sent to New Guinea as Chief Nurse of the 36th Evacuation Hospital. The unit took part in the invasion of Leyte and Luzon and in 1945 was sent to Luzon for the liberation of allied prisoners at Santo Tomas University.

Miss Alma Gee has also recently been discharged from the Army Nurse Corps with the rank of First Lieutenant. She was with the Army Transport Service assigned to a hospital ship carrying wounded from the South Pacific area. Prior to the war she worked for Pan American Airways in Honolulu.

Mrs. Moran, a new arrival from the mainland, was formerly with the Poliomyelitis Clinic in Salt Lake City.

KAUAI COUNTY NURSES' ASSOCIATION

Miss June Triplett, Public Health Nurse from Minnesota, joined the staff of the Kauai Board of Health in March 1946. She received her B.S. Degree from the University of Minnesota and graduated from the Minneapolis General Hospital. Miss Triplett was first assigned to Kealia District but at the beginning of July moved to Puhi District.

Kauai Public Health Nurses were on the job during the tidal wave disaster. Miss Willa Shell, PHN, recently from the mainland, managed to get to the Haena District, which was so seriously hit, almost as soon as the first injured person was brought to the hills. She gave first aid treatments, helped to distribute food and other supplies and assisted in organizing searching parties for missing persons. Miss June Triplett and Miss Nellie Takano followed Miss Shell into the area the second day and were relieved by Miss Thelma Kuwamoto and Miss Ruth Imai later that week. Miss Dorothy Teall, PHN Supervisor, was able to obtain medical assistance for the area from the Army Air Corps. The Public Health Nurses are to be commended for their splendid work in the handling of the situation which they did as though they had been especially prepared for disasters.

Kauai PHNs are fortunate in having the assistance of Miss Edith Macdonald, Psychiatric Social Worker for the Territory, on a part-time basis for this Island. In August, Mrs. Jeanette Schribsted, Nutritionist employed by the Kauai Tuberculosis Association, will arrive to work with the Public Health Nurses.

Resignations: Mrs. Lillie Moodie, Makaweli, Kauai, to return to the mainland. She has been replaced by Miss Roberta Irvine, of Ames, Iowa. Mrs. Yoshiko Tanigawa, general duty nurse at Wahiawa, Kauai. Mrs. Lucille Randall, Wilcox Memorial Hospital, to return to the mainland. Faye Snyder and Lois Adams, Wilcox Memorial Hospital, to move to Honolulu. *Appointments:* Marjorie M. Kabrick and Jeanne M. Smith to the Nursing Staff of G. N. Wilcox Memorial Hospital in April 1946. *Marriages:* Grace Sakai of Kapaa to Dr. Sam Tashima of Honolulu, May 18. Tsugie Nishimura, Kapaa, to Soichi Kadota. Mrs. Kadota is continuing her work as surgical nurse at Wilcox Memorial Hospital.

MAUI DISTRICT NURSES' ASSOCIATION

Paia Hospital: Miss Marian Beazley and Mrs. Marie Dover have returned to the mainland. Miss Lela Weitz of Palo Alto, California, Miss Elizabeth Dill of Durango, Colorado, and Mrs. Yukiko Higa of Paia have joined the staff this year.

Malulani Hospital: Mrs. Edward Schmidling, Acting Superintendent of Malulani Hospital, and Mr. Schmidling returned from the mainland in June with an adopted infant son, John Crabbe Schmidling.

Miss Lucy Lee Fraser, Buffalo, N. Y., has joined the nursing staff at the Malulani Hospital. Miss Mildred Yamanaka has left for an extended trip to the mainland.

Maui Board of Health: Mrs. Vera Hansel and Miss Janice Mickey from the Main Office of the Territorial Board of Health in Honolulu were on Maui in June to conduct a nursing institute. All nurses and people professionally interested in tuberculosis were invited to the meetings.

IN MEMORIAM

MISS JANE SERVICE, P.H.N.

Miss Jane Service, veteran Public Health Nurse, lost her life in the tidal wave which struck Hawaii on April 1, 1946.

Born in Cleveland, Ohio, of Irish parentage, the twelfth of thirteen children, Miss Service had spent the greater part of her life in the nursing field; first as a private duty nurse and later in public health.

After working several years in the Seymour Avenue Public Health Center in Cleveland, she went to California. In July, 1925, she came to Hawaii, where she spent the balance of her life. Going directly to Hilo, she assumed the duties of Chief Public Health Nurse on the Island of Hawaii, and continued in this capacity until her retirement nineteen years later in June, 1944. Her old Model-T Ford was known the length of the Hamakua coast; her loyalty and devotion to her work and to her nurses were known throughout the Territory.

In her youth Miss Service had studied to become a concert pianist, an ambition which she was forced to abandon because of ill health. Later, and after a number of years of nursing, she went to Germany, where she studied piano for two years. Her interest in music and her love for it continued throughout her lifetime.

Miss Service is survived by one sister-in-law, Mrs. Harvey D. Service, of Columbus, Ohio, and a number of nieces and nephews and their children. One niece, Honora Neill, lived with her in Hawaii but was in Aiea, Oahu, at the time of her death. Miss Service was buried in Hilo, on the Island she loved and served for two decades.

Hers was a valiant spirit and there are many who mourn her tragic death and say with deep regret their last "Aloha, Janie."



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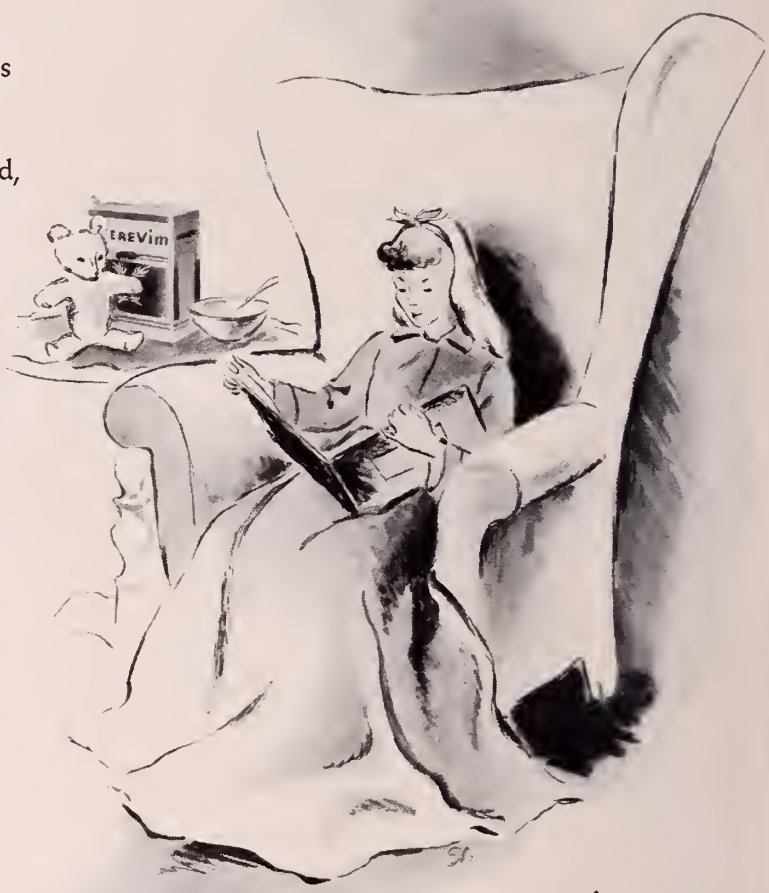
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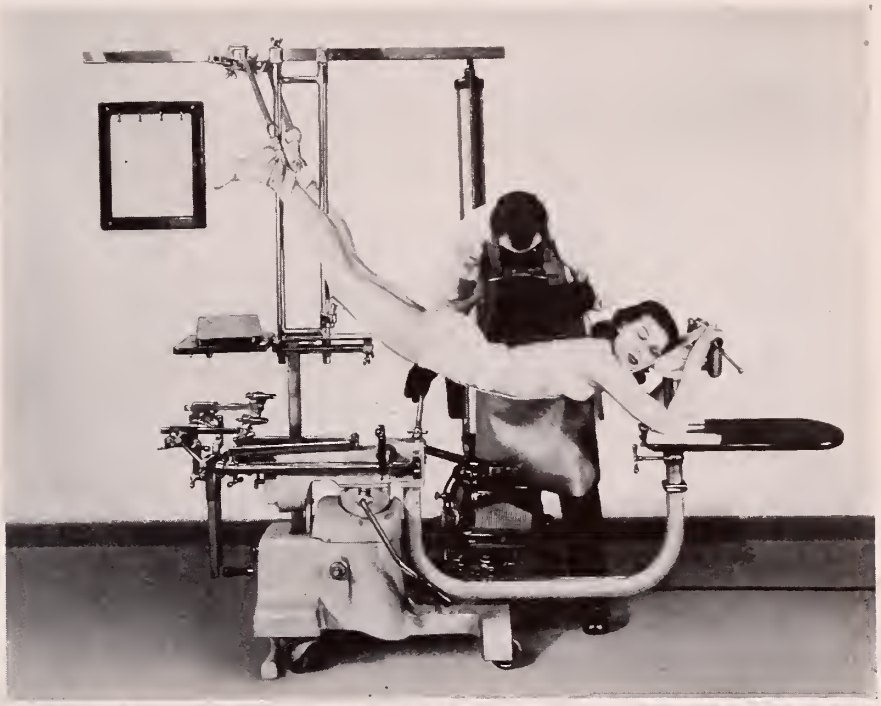
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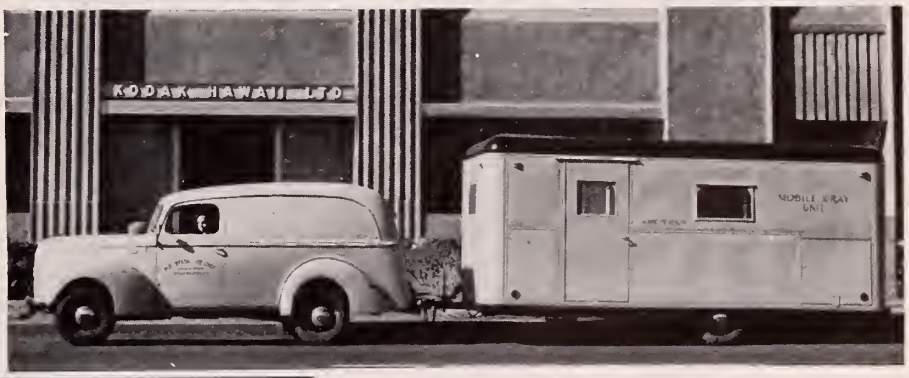
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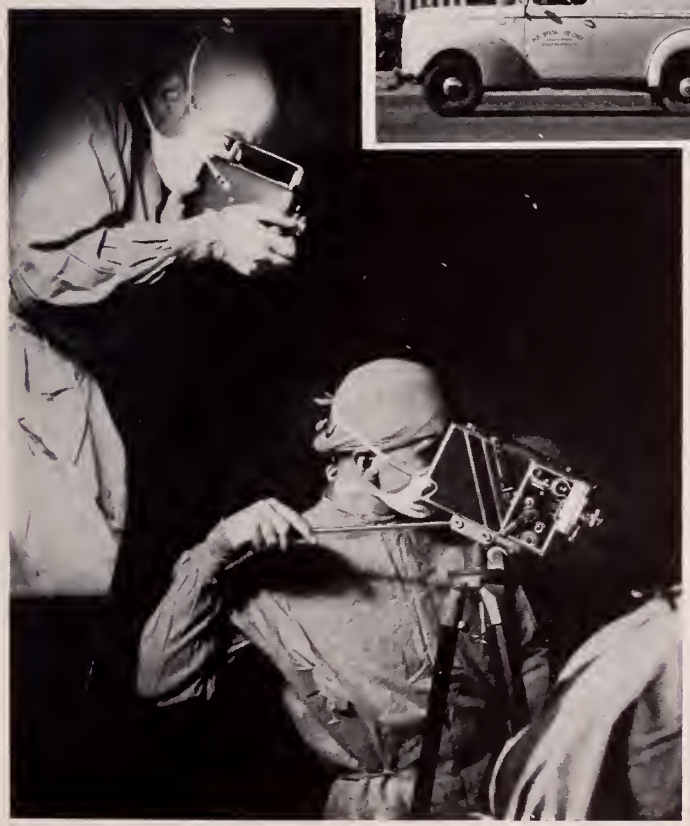
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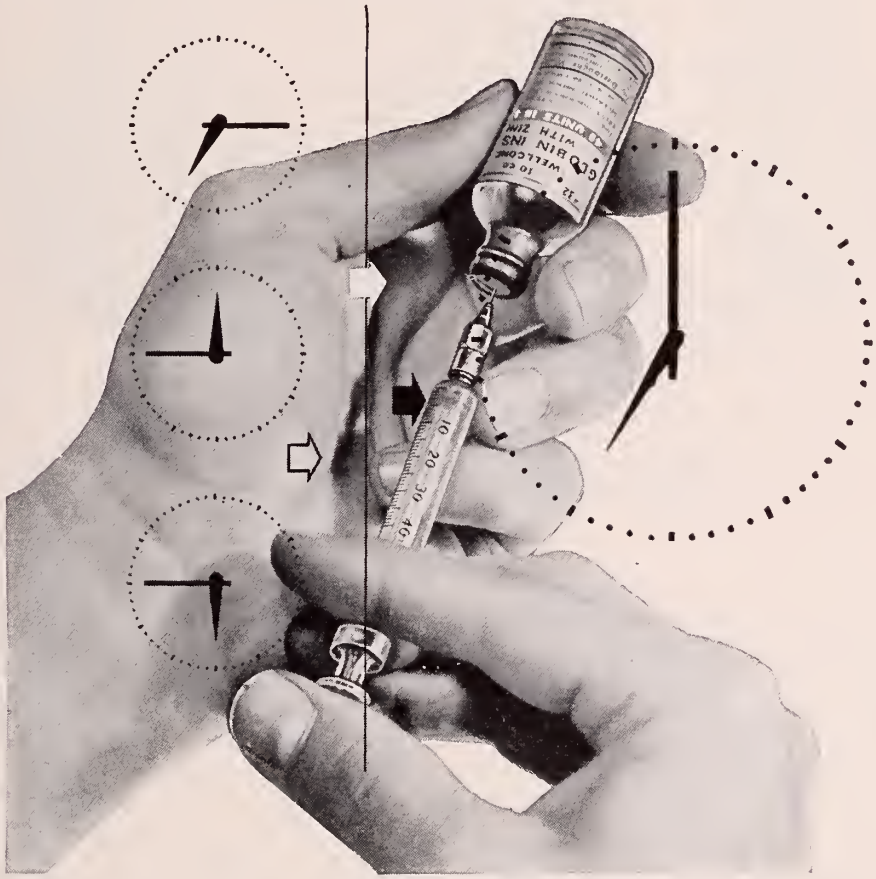
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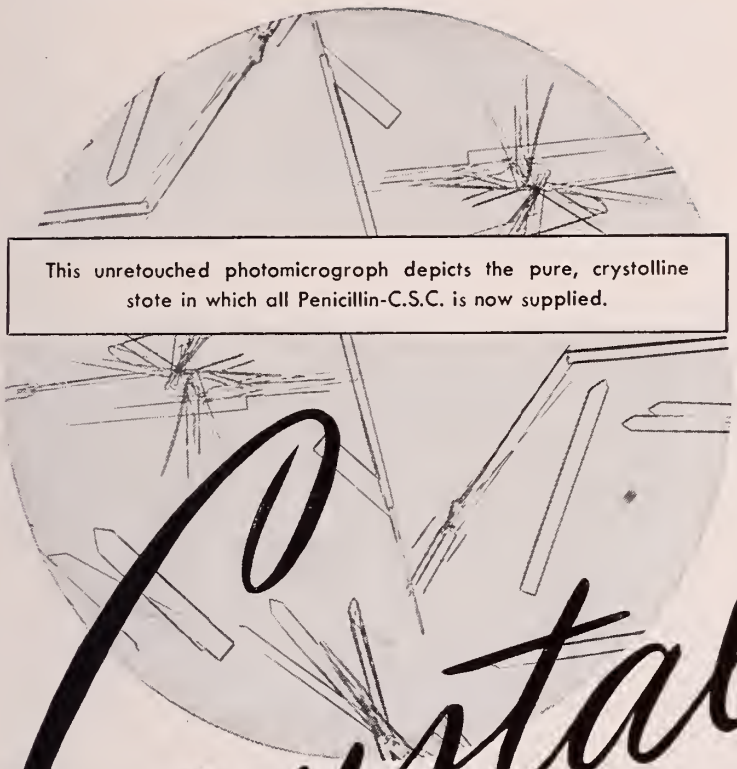


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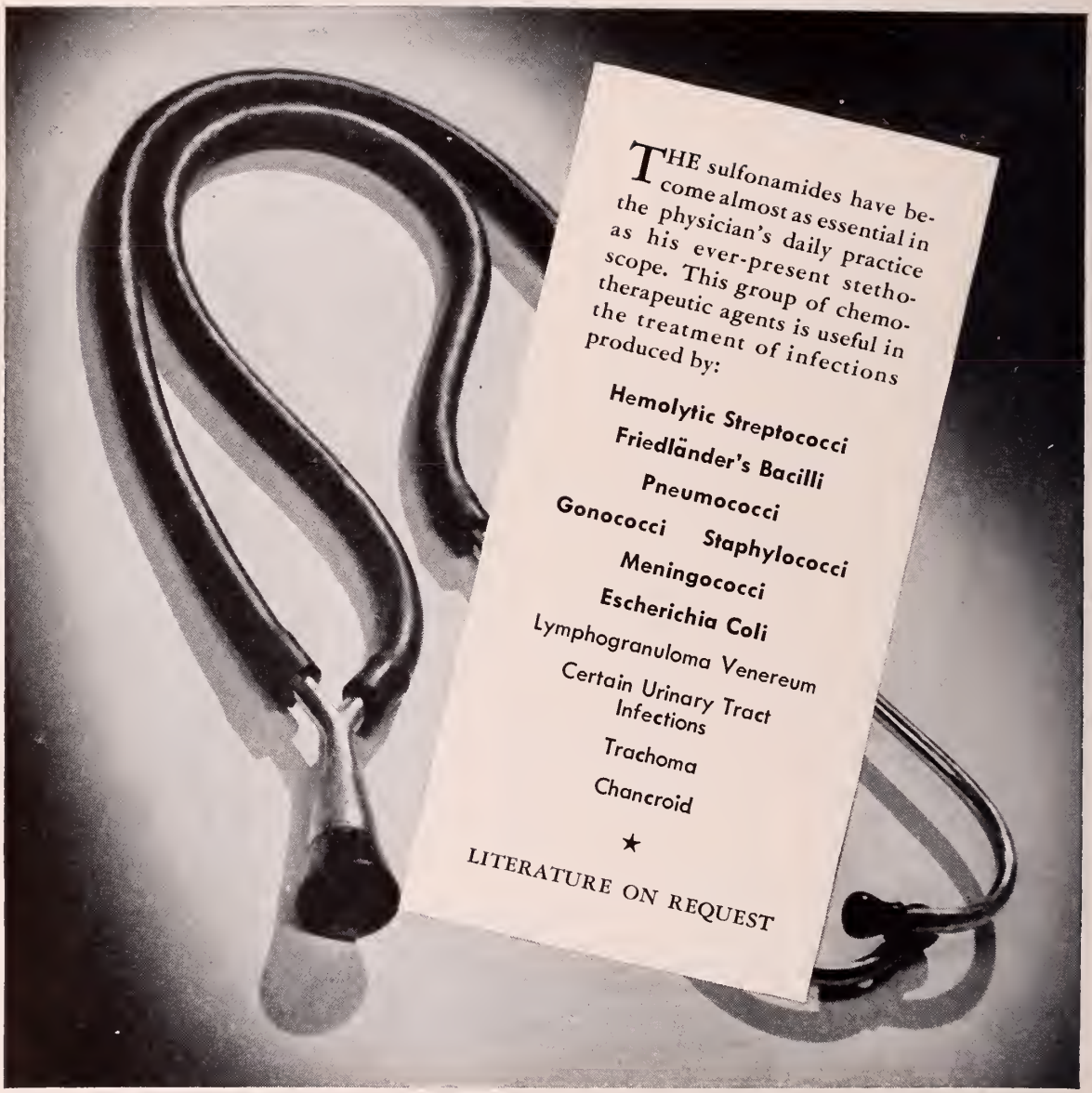
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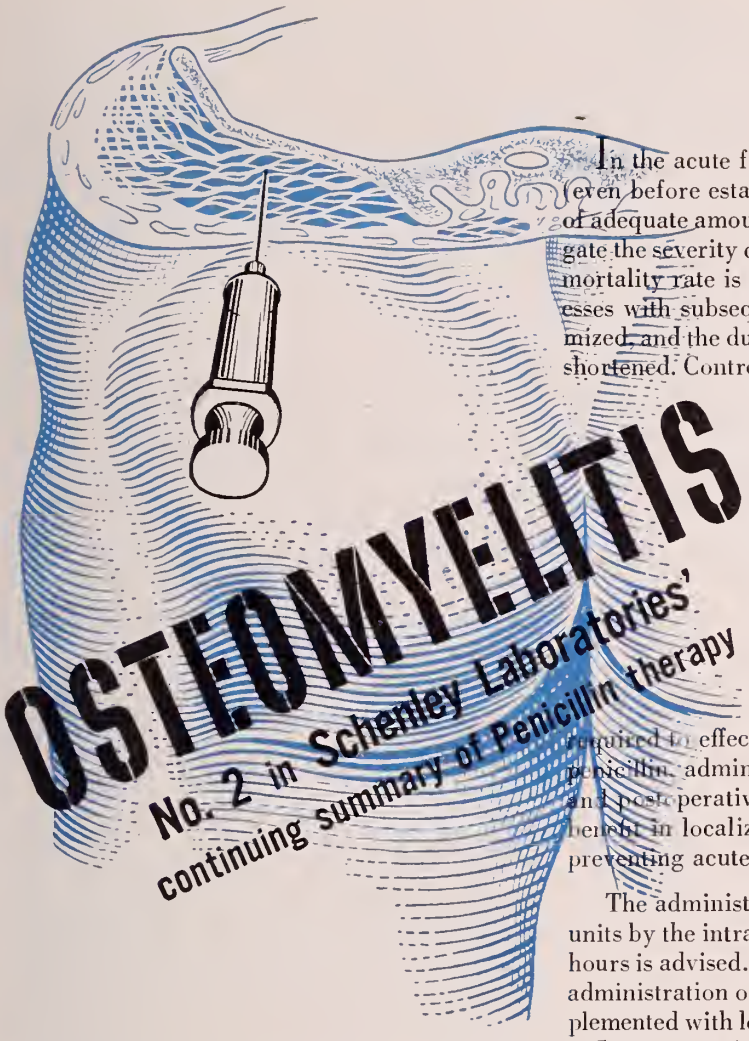
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KEEFER, C. S. *Penicillin—Its Present Status in the Treatment of Infections: The Nathan Hatfield Lecture XXIX, Am. J. Med. Sc. 210:147 (Aug.) 1945.*

ALTEMEIER, W. A.: *Treatment of Acute Hematogenous Osteomyelitis with Penicillin, Ohio State M. J. 42:489 (May) 1946.*

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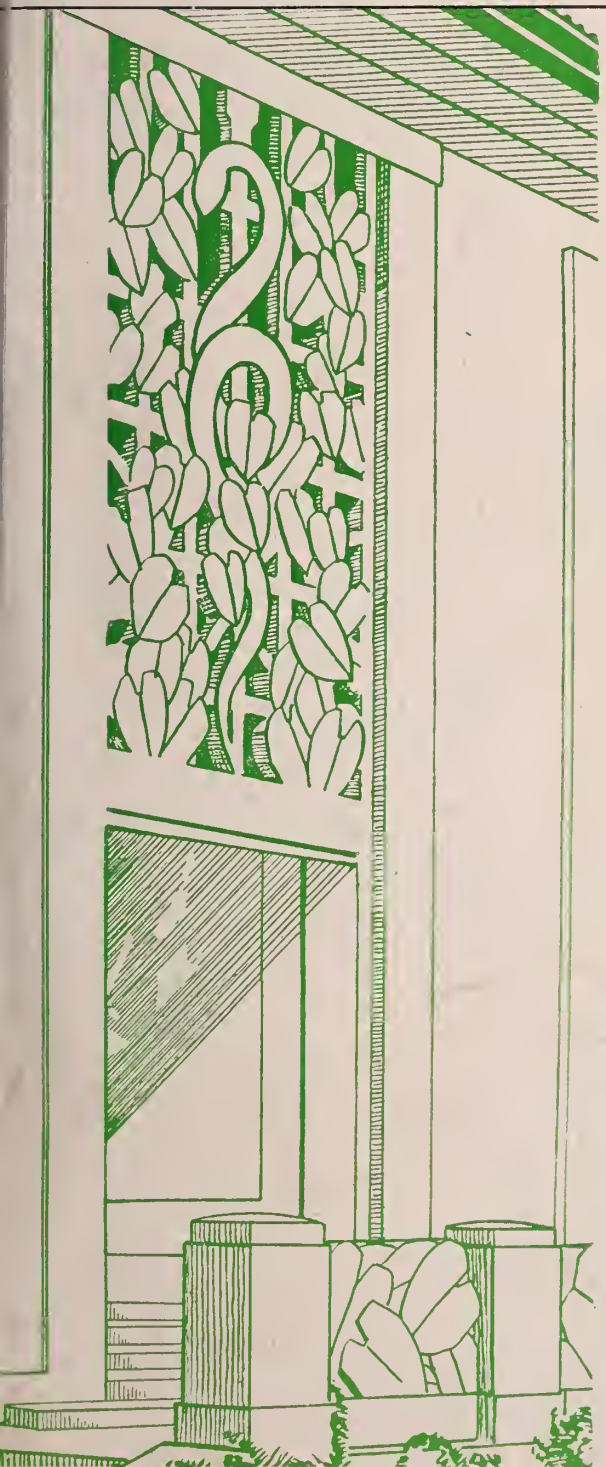
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* *Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154*
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60



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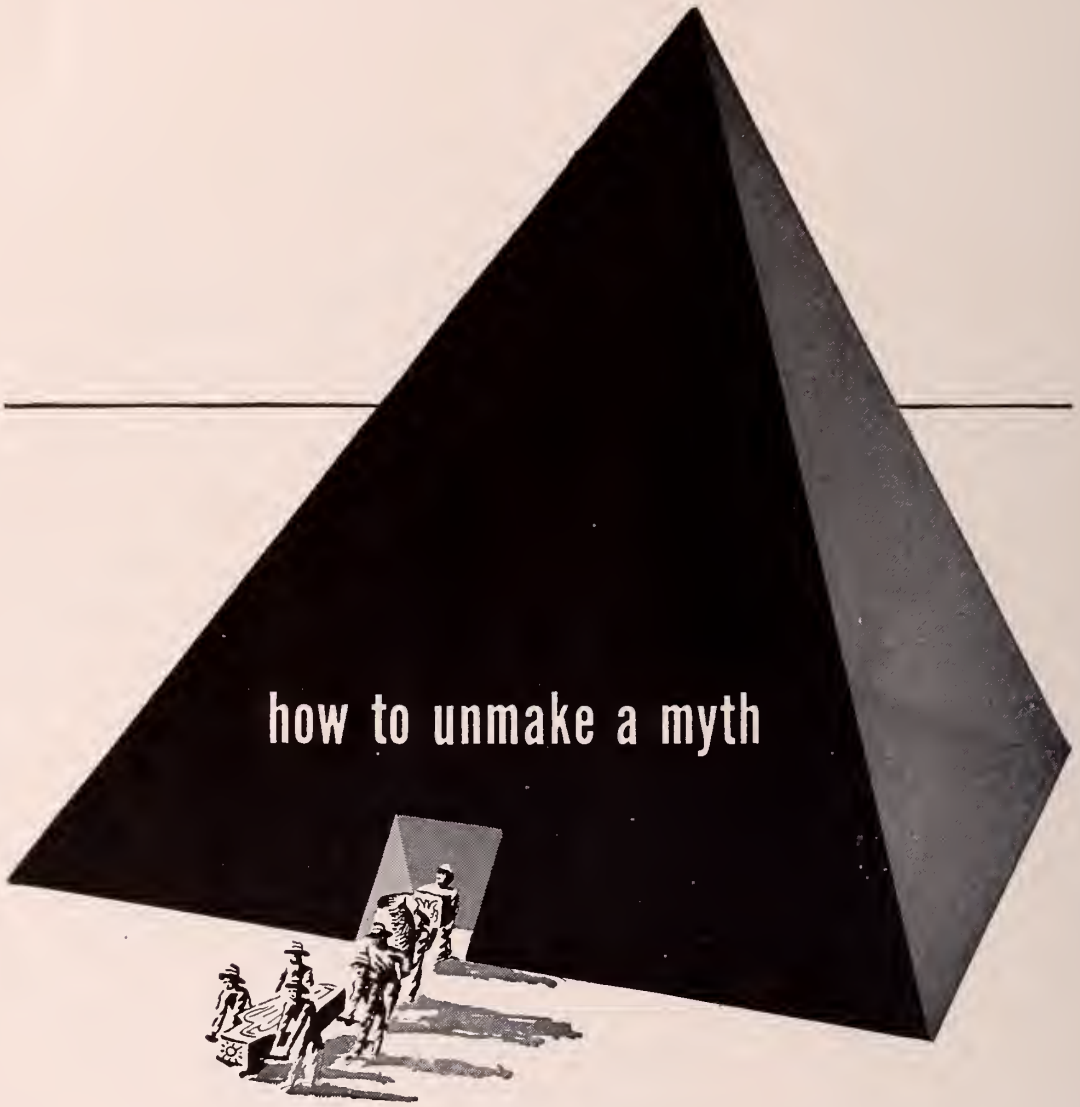
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1. Am. J. Dis. Child. 66:1 (July) 1943

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Bad winter ahead for the pneumococci

STORMY DAYS are usually followed by sharp increases in the incidence of upper respiratory infections, often the prelude to pneumococcal pneumonia. Fortunately, physicians are prepared to combat the pneumococci with sulfonamides and penicillin.

Although sulfonamides are generally effective, problems sometimes arise in their administration. In the patient with cardiac or renal disease, it may be difficult to maintain proper fluid balance. This imbalance may lead to urinary tract complications. Others may experience untoward toxic effects or lack of response to the drug. In these cases, Penicillin, Lilly, is particularly valuable. While the intramuscular injection of 10 to 15 thousand units every three hours throughout the night and day might be helpful, doses of 20 thousand or more units at the same intervals are preferable. Penicillin, Lilly, is available in 20-cc. ampoules containing 100,000, 200,000, or 500,000 units.

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Recent Advances In Chemotherapy

CHAUNCEY D. LEAKE, Ph.D.*

CHEMOTHERAPY—the use of specific chemicals to destroy or inhibit the growth of specific pestiferous organisms—was developed chiefly under the stimulus of Paul Ehrlich (1854-1915) when he successfully devised chemical methods for treating trypanosome infections and syphilis. The screening of drugs proposed for chemotherapeutic purposes is accomplished by experimental means on the basis of a standardized "therapeutic index." This is the ratio of the smallest dose producing the desired result to the smallest dose likely to cause an unwanted effect. Statistical methods, introduced by J. W. Trevan, J. H. Burn, and J. H. Gaddum in England and by C. I. Bliss in this country, have assisted greatly in placing chemotherapeutic studies on a sound scientific basis. Great advances have occurred recently not only in relation to the specific chemical management of human disease, particularly through such drugs as the sulfonamides and the antibiotics, but also in such matters as pest control and attempts at mass prevention of infection.

The most important chemotherapeutic agents useful in medical practice are carefully and fully described in *New and Non-Official Remedies,* which is published annually by the Council on Chemistry and Pharmacy of the American Medical Association. This should be consulted for precise information regarding various chemotherapeutic agents.

In the discussion of chemotherapy, it may be wise to classify the drugs in question in relation to the organisms against which they are chiefly to be used. We may begin with the higher organisms and work down to bacteria. Chemotherapy has been particularly effective against helminths and protozoa. More recently chemotherapy has been highly successful against bacteria. We have not yet been able to devise effective chemotherapy against most virus diseases.

Chemotherapy may be considered to be a systematic application of certain fundamental antiseptic principles. The idea, of course, is to destroy the micro-organisms causing disease. It would be ideal to achieve, if possible, as Ehrlich once thought, the complete destruction of all organisms causing a disease in a patient with a single dose of an effective drug, without any injury to the patient. This ideal, however, has never been reached, and is not likely to be obtained. It is difficult to find a chemical which can tell the difference between one form of living tissue and another. The success of chemotherapy depends on the principle that the successful drug will have a more powerful destructive effect on the micro-organisms causing the disease than upon the host, against which no harmful effect is desired.

The fact is that successful chemotherapeutic agents may injure the patient. The careful regulation of dosage is an extremely important matter in chemotherapy, in order to obtain the highest effective concentration of the drug, so as to inhibit or destroy the invading micro-organisms, without at the same time causing any significant harm to the patient. Unfortunately, if any of the disease-causing germs escape the effects of the chemotherapeutic agent, it may be expected that they will have increased resistance to further contact with it.

This matter of increasing resistance of pathogenic organisms is developing into a serious problem not only in connection with the sulfonamides but also with regard to penicillin. Such increased resistance is, of course, to be expected and is a natural consequence of the principle of survival of the fittest organisms in a changing environment. No matter how successful a new chemotherapeutic compound may be when first introduced, there is certain to develop some resistance to it on the part of organisms which may survive contact with it. Some organisms may show actual structural change after contact with a new drug, as Fennel and his associates have recently reported in the case of pencillin.

WAR CHEMICALS

Chemical warfare agents are generally considered to be developed for the control of human pests. While it is unlikely for military reasons that war gases will be used in future wars, it remains pertinent for civilians generally to know how to protect themselves against such possible use. Mild oxidizing agents and detergents such as sodium hypochlorite, and soap, seem still to be effective both in prevention and treatment.

More interesting in peace time is the application of chemical warfare knowledge to the management of disease. Gilman has recently reported on the therapeutic applications of such

* From the University of Texas Medical Branch. Presented before a Post-Graduate Session of the Honolulu County Medical Society, May 7 and 9, 1946.

chemical warfare agents as British Anti-Lewisite, the fluorophosphates, and the nitrogen mustards. British Anti-Lewisite is 2,3-dimercaptopropanol. It reverses the inhibitory effects of heavy metals on SH-containing enzyme systems. As a result it is useful in treating heavy metal poisoning. It has been found to be clinically effective in treating acute mercuric chloride poisoning and in chronic arsenic toxicity.

The fluorophosphates inhibit cholinesterase. They may thus be effective in the treatment of myasthenia gravis and glaucoma.

The nitrogen mustards are powerful irritating materials locally and have a marked cytotoxic action. They also inactivate many essential cellular enzymes. Their cytotoxic action is particularly marked against lymphoid tissue and actively proliferating cells. The nitrogen mustards therefore may have therapeutic use in the treatment of neoplasms of lymphoid tissue. Favorable results have been obtained in patients with Hodgkin's disease.

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RODENTICIDES AND INSECTICIDES

Dramatic advance has been made during the war period in the control of pestiferous rodents and insects. A most amazingly powerful rat poison has been developed by Richter in alpha-naphthyl thiourea (ANTU). This agent acts on the thyroid and is readily ingested by rodents, and, while dangerous for small animals, may be used in such a way as to eradicate rats from a given area.

Of much popular interest has been the development of DDT (1-trichloro-2,2-bis-para-chlorophenyl ethane). Its low toxicity for mammals and its great effectiveness against almost all sorts of insects have resulted in its wide use, not only to clear out entire areas of malaria-bearing mosquitoes, but also around households in controlling ants, cock-roaches, mosquitoes, and flies. There is, of course, a public health hazard in the widespread use of DDT. It has a neurotoxic action on absorption, but being insoluble in water it is not readily absorbed from either the skin or the stomach. It may cause injury to the liver and heart.

English investigators have developed a potent insecticide in "666" which is 1,2,3,4,5,6-hexachloro-cyclohexane. The gamma isomer, known as "gammexane" is very toxic for insects, and apparently less toxic than DDT for humans.

Much attention was directed during the war to the development of insect repellents. The most effective insect repellents are dimethyl-phthalate, and n - butyl - mesityl - oxide - oxalate. How these compounds repel insects is not known. They should certainly be helpful in insect infested areas when mixed with talcs or other preparations which may be applied to the skin or clothing.

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ANTHELMINTICS

Such crude plant preparations as wormwood, chenopodium and aspidium were developed in antiquity as anthelmintics. Some are mentioned in the Egyptian medical papyri. They are quite fully described by Dioscorides, the surgeon of Nero, in his famous *Materia Medica.* With various refinements, to standardize dosage and to reduce toxicity, these crude preparations persisted as the chief anthelmintics until this century. Recognition of the anthelmintic action of chloroform suggested to Hall and his associates that chlorinated derivatives might be developed which would be less toxic than chloroform and more effective. These studies led to the extensive use of carbon tetrachloride as an anthelmintic. The serious possibility of liver injury on repeated administration of carbon tetrachloride prompted its abandonment in favor of tetrachlorethylene. While this drug, like other chlorinated compounds, may cause liver injury, it is much less dangerous than either chloroform or carbon tetrachloride, and has wide use as an anthelmintic, particularly against Ascaris. The possibility of liver injury can be reduced by promoting a high calcium intake.

Lamson's studies on the anthelmintic properties of hexylresorcinol have resulted in its clinical use against many types of intestinal worms. Hexylresorcinol is a brown, waxy, crystalline material which is highly irritating to mucous membranes. Accordingly, it must be administered in oil solution or heavily coated, in order to prevent mucous membrane irritation. While much of it is excreted in the urine after ingestion, it is relatively nontoxic.

For worm infestations of the skin, dyes such as gentian violet, and other penetrating compounds such as tincture of iodine or various essen-

tial oils, may be useful. The gradual control of sources of infection have limited the spread of helminth infections so that there is not now as much interest in anthelmintics as formerly was the case. There are, however, many types of new worm and fungus infections deriving from tropical sources, which may make further study of anthelmintics and fungicides desirable.

REFERENCE

Lamson, P. D., Hexylresorcinol, *Am. J. Hyg.* 13: 568, 803, 1931.

FUNGICIDES

It is well for physicians to remember that copper sulphate is one of the most effective fungicides. Even though no clinical reports seem to have been made, it would be worthwhile to try dilute water solutions of copper sulphate for fungus infections of the skin. Weak copper sulphate solutions are highly effective in preventing fungus deposits on leather, book covers, and other objects on which molds readily accumulate in warm moist climates.

More satisfactory for penetration into the skin when fungus infection is involved, are such dyes as gentian violet, and such essential oils as oil of wintergreen or oil of peppermint. Propionic and undecylenic acids and their derivatives appear to be useful for skin application in fungus infections. For the common dermatophytic infections, local application with cotton of 10% salicylic acid in ethanol is useful, as is ammoniated mercury ointment.

For internal use when there may be fungus infection of the lung, volatile phenols, such as thymol, are sometimes effective. Similarly, camphor may be used internally for fungus infections. It is important to remember that fungus infections of the lung may simulate the clinical and pathological findings in tuberculosis.

REFERENCE

J. G. Horsfall, Fungicides and Their Action, *Chron. Botanica,* Waltham, Mass., 1945.

FILARIASIS, LEISHMANIASIS AND SCHISTOSOMIASIS

One of the important diseases encountered by our troops in the Pacific is filariasis. The causative agent is widely distributed, and infection with the disease is readily possible in all tropical countries. Antimony compounds seem to be most effective as chemotherapeutic agents, but their success is by no means satisfactory in all cases. Potassium or sodium antimony tartrates are probably quite as effective as many of the organic antimonials. The antimonials are usually given intramuscularly, and their use is frequently accompanied by pain and evidence of toxic reaction.

The most effective organic antimonials are "fuadin" (sodium antimonyl catecholdisulfonate), "stibenyl" (sodium 4-acetamino benzene stibonate), "neostibosan" (diethyl-ammonium p-stibanilate), and "neostam" (a nitrogen glucoside of sodium p-stibanilate).

The organic antimonials show little chemotherapeutic specificity, but this matter is less important than such factors as local irritation, toxicity, and rate of absorption and distribution. The antimonials are generally accepted as the only reasonably satisfactory treatment for leishmaniasis, schistosomiasis, and the granulomas. However, the diamido compounds, developed by Yorke, are reputed to be highly effective in kala azar.

Antimony sodium thioglycollate has been widely employed in kala azar, in doses of 100 milligrams in 0.5 per cent solution every three days. "Fuadin" is administered in a 6.3 per cent solution intramuscularly for the total of 40 cc. in fifteen days. An anemia may develop in connection with the use of this drug due to iron deficiency. Iron salts should be administered after the completion of treatment.

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O. Temkin, Medicinal Treatment of Filariasis, *Nat. Res. Counc.*, Office of Medical Information, Washington, 1945. C. K. Banks, Organometallic Compounds as Chemotherapeutic Agents, in *Advancing Fronts in Chemistry:* Vol. 2, Chemotherapy, Reinhold, New York, 1946.

AMEBIASIS

Amebic infestation is probably far commoner than supposed. Fortunately, in temperate climates, intestinal involvement frequently is symptomless. As one approaches the tropics the symptoms tend to become more severe. In amebiasis it is important to remember that a positive diagnosis can only be made on the basis of definite recognition of motile forms or cysts in the stool. Further, absence of such forms on repeated examination is the only satisfactory criterion for effectiveness of treatment. Re-infection appears to be common. If infection is found in one member of the family, all members of the household should be examined and treated if carriers are discovered.

Many types of drugs are effective in amebic infestation: alkaloids such as those of ipecac and kurchi; organic arsenical compounds such as acetarsone and carbarsone; halogenated hydroxyquinolines, such as vioform and diiodoquin, and various miscellaneous astringents and antiseptics such

as tannins from various crude plant sources, insoluble bismuth salts, and various phenols.

The kurchi alkaloids are relatively ineffective. Emetine and its various derivatives are highly successful in treating amebiasis, but unfortunately are apt to give toxic effects, particularly involving the heart and nervous system. Their use should therefore be reserved for amebic hepatitis or amebic abscess, where penetration into the tissues involved is most effectively obtained by alkaloidal salts of emetine. The dosage of emetine salts should be carefully watched. A total of 10 milligrams per kilo should not be exceeded, since cardiac or nervous symptoms are apt to develop at total dose levels beyond this range. The emetine alkaloids are slowly eliminated from the body and tend to accumulate. The intramuscular injection of 1 milligram per kilo for 10 days should be satisfactory, but this total dose should not be exceeded. Carbarsone and vioform are probably the most satisfactory amebicides for chronic carriers and mild cases of amebic dysentery. The dosage in each case by mouth is 0.25 grams twice daily for ten days. Carbarsone should not be used if there is any evidence of kidney or liver involvement. Both drugs may be used locally to handle rectal amebic ulcers. Both drugs are also effective against protozoan invaders of the vaginal tract. Diiodoquin contains more iodine than vioform and is probably equally effective in amebiasis. It is always to be remembered that iodine is expensive, and therefore that drugs containing iodine are likely to cost more than a patient is accustomed to pay. H. H. Anderson and his associates are showing by careful experiments the high amebicidal value of the arsine oxide analogue of carbarsone.

Miscellanous antiseptics and astringents are not specific in amebiasis, but afford help by protecting the mucous membranes of the gut and by general antiseptic action on amebae. The extensive folklore regarding various plant remedies for use in dysentery is explainable on the basis of the tannin content of such crude drugs and the resulting astringent action in the bowel with relief from diarrhea. The most effective inorganic intestinal astringents are bismuth salts. Of these it is preferable to use bismuth subcarbonate, since it has the least untoward effect. The formerly more popular subnitrate is not as satisfactory, since nitrous acid may form in the bowel with resulting absorption and toxic lowering of blood pressure.

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C. D. Leake, Chemotherapy of Amebiasis, *JAMA*. 98: 195, January 16, 1932. H. H. Anderson, Amebacides, *Encyclopedia of Chem. Tech.*. Brooklyn, 1946.

MALARIA

Doctor Alfred C. Reed of San Francisco insisted many years ago that malaria is still the most important single disease plaguing mankind. It was not until World War II, however, that a large scale systematic chemotherapeutic survey of malaria was made.

Specific chemotherapy, in Ehrlich's sense, may be said to have arisen in the case of malaria when cinchona bark was dramatically introduced by the Spaniards from Peru in the seventeenth century as a specific "cure" for fever. Its effectiveness was contrary to any current theory of disease, and resulted in a veritable revolution in medical practice. In the nineteenth century, when the alkaloid quinine had been isolated from cinchona by Pelletier and Caventou, a serious economic factor developed with the depletion of the cinchona forests. Attempts to find adequate substitutes for quinine were significant in hastening the development of organic chemistry. This effort led to the introduction of the common antipyretics, but did not produce anything resembling the specificity of quinine in fevers, particularly malarial. The discovery of the causative agent of malaria by Ross stimulated further search for quinine substitutes. It was necessary first to solve the difficult problem of the chemical constitution of quinine. Meanwhile the Dutch had developed a practical quinine monopoly through the development of cinchona forests in Java. The sudden entrance of Japan into World War II cut off this supply, and made necessary immediate attempts to find a satisfactory substitute for quinine, since malaria is the chief disease encountered by troops in the tropics. In this chemotherapeutic search, important ideas had developed through the German introduction of plasmochin and atabrine.

The Committee on Medical Research of the Office of Scientific Research and Development promoted extensive chemotherapeutic research on the malaria problem in cooperation with the Army, the Navy, the U. S. Public Health Service and industrial firms, beginning in 1941. A preliminary survey of new antimalarial drugs studied by the group has been made by O. Temkin (1944). An extensive special report is promised for early appearance, and E. K. Marshall, Jr., of the Johns Hopkins University, has offered an important summary of the survey.

At the outbreak of the war, says Marshall, no definite information was available as to the relative value of quinine and quinacrine (atabrine) in the suppression and treatment of malaria. In

an attempt to find drugs superior to quinine and quinacrine, over 14,000 compounds of various types of antimalarial activity have been screened in avian infections and the potentialities of about 100 of the most promising compounds were explored in human malarias.

As Marshall points out, the discovery of a true causal prophylactic for human malaria, a drug which would eradicate some stage of the parasite before trophozoites are produced, would constitute a great advance. Quinacrine is probably the most effective readily available drug in malaria. It is effective as a cure in blood-induced vivax malaria but not in sporozoite-induced infections. However, in falciparum malaria quinacrine cures both blood-induced and sporozoite-induced infection. Marshall concludes that the discovery of a drug which would resemble quinacrine in its antimalarial properties but which, in addition, would cure vivax malaria, would probably be of more value than a causal prophylactic which does not cure. Out of many thousands of compounds studied, the 8-amino-quinolines seem most promising. One compound, SN 13,276, 8-5-isopropyl-amino-amylamino-6-methoxy-quinoline, is curative in smaller dosage than pamaquine (plasmochin), and is about half as toxic for man.

While it appears that great advance has been made in our knowledge of the chemotherapy of malaria, the two drugs, quinine and quinacrine, remain the chief ones available for general use. Both have outstanding toxic manifestations, and must be watched with care. It must be remembered that quinine is a general protoplasmic poison and that it easily injures young nervous tissue. While quinacrine seems to be safer than quinine, it has toxic manifestations with respect to the liver and is locally irritating to the gastric mucosa. It may also cause an unpleasant skin eruption and discoloration.

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SYPHILIS

It is an interesting commentary on the rapidity with which chemotherapeutic procedures change, to obesrve that the second edition of J. E. Moore's *Modern Treatment of Syphilis* (Springfield, Ill., 1944) does not contain a single reference to penicillin. Within less than two years, the therapy of syphilis [early syphilis?—Ed.] has been completely changed, abandoning almost entirely the classic mercury, bismuth, and arsenic drugs, and relying instead on penicillin.

In the management of syphilis it is important to remember that the disease is systemic as soon as the primary lesion is apparent. Local treatment of the primary lesion is therefore not effective in stopping the disease. More than in the case of any other disease, perhaps, is it to be noted in syphilis that a variety of new remedies have been acclaimed as being very successful, only to be recognized subsequently as not justifying the original enthusiasm. The parasite seems to be so well adapted to humanity, that it may remain quiescent in human tissues for many years. It is further to be remembered that the positive serologic test is an index merely of the extent of tissue reaction to the presence of an irritating invading organism, which may not be caused in every case by syphilis. In the case of syphilis, it is increasingly important that physicians treat the patient as a whole and not merely a positive Wassermann.

When the disease was first recognized at the end of the fifteenth century, one of its most effective remedies was promptly introduced in the form of mercury ointment. Mercury is still valuable as an adjunct in syphilitic therapy and may be used in the form of the ointment or by the intramuscular injection of such mercury compounds as the salicylate. Care must be used, of course, to avoid toxic effects from mercury, not only with respect to the kidney and liver, but also with regard to the teeth and mouth. For mercury ointment to be effective in syphilis it must be well rubbed into the skin. For the area chosen, such as the inside of the thigh, the rubbing should proceed for at least twenty minutes. The residue may be readily removed by kerosene. The skin area used should be changed for the weekly or biweekly rubs, for which four to five grams of the standard ointment should be used. The intramuscular dose of mercury salicylate in oil is ordinarily about 100 milligrams.

Ehrlich's dramatic introduction of "salvarsan" in the early twentieth century was hailed with enthusiasm, and it was thought at first that a single dose of this colloidal organic arsenical compound could sterilize the body infected with the spirochete. Failure to achieve this ideal resulted in gradually prolonging the "standard" arsenical therapy, and with various modifications of arsphenamine in order to simplify administration and reduce toxicity. Recognition that the anti-syphilitic organic arsenical compounds probably act after being converted to the corresponding arsine oxide in the body, led to the direct clinical use of oxophenar-

TABLE 1. *Antisyphilitic Drugs*

NAME	CHEMICAL CONSTITUTION	DOSE
Acetarsone NNR	m-acetylamino-p-hydroxy phenyl arsonic acid	Orally: 0.25 gm. thrice daily for 7 days, not satisfactory in syphilis.
Arsphenamine USP	diamino-dihydoxy-arseno benzene dihydrochloride	0.2 to 0.4 gm. I.V. in sterile H_2O after exact neutralization, weekly.
Bismarsen NNR	bismuth arsphenamine sulfonate	0.1 to 0.2 gm. in 2 cc. sterile 0.25% butyn sulfate, I.M. weekly or semi-weekly.
Bismo-cymol NNR	A basic bismuth salt of campho-carboxylic acid 38% bismuth	0.1 gm. I.M. weekly.
Bismosol NNR	sterile 10% solution of potassium sodium bismutho-tartrate	1 cc. every two days I.M.
Bismuth ethyl camphorate NNR	bismuth salt of camphoric acid ethyl ester	2 cc. I.M. in oil weekly.
Bismuth and Potassium tartrate USP	basic potassium bismuthyl tartrate, 62% bismuth	0.1 gm. oil suspension I.M. weekly, or 50 mgm. I.M. water sol. I.M. 3 times weekly.
Bismuth sodium tartrate	basic sodium bismuthyl tartrate 73% bismuth	30 mgm. in 3% water sol. I.M. thrice weekly.
Bismuth subsalicylate	basic bismuth salicylate, 64% bismuth	1 cc. 13% oil susp. I.M. weekly.
Dichlorophenarsine "Chlorarsen" HCl USP	3-amino-4-hydroxyphenyl dichloro-arsine HCl, with sodium citrate and sodium carbonate	40-60 mgm. I.V. in sterile water every 5 days.
Iodobismitol with Benzocaine NNR	solution of sodium bismuth iodide and sodium iodide in propylene glycol containing benzocaine	2 cc. I.M. every 3 days.
Mercurettes NNR	Briquettes of 3.25 gm. metallic mercury in performed cacao butter to make 8 gms.	One applied by inunction.
Mercurial ointment mild USP	10% mercury in fat and wax	5 gm. by inunction, in courses.
Mercuric Oxycyanide NNR	A basic mercuric salt of hydrocyanic acid, containing about 53% mercuric cyanide and 47% mercuric oxide	Applied locally in 1:5000 sol., or given I.V. in doses of 5 mgm. in 5 cc. water.
Mercuric Salicylate in Oil USP	65 mgm. with local anesthetic in 1 cc. oil	65 mgm. I.M. weekly.
Mercuric Succininide USP	$C_8H_8N_2O_4Hg$	15 mgm. I.M. in 2.5% sol. semi-weekly.
Neoarsphenamine USP	3,3'-diamino-4,4'-dihydroxy arsenobenzene-N-methyl sulfoxylate	0.6 gm. in 5 cc. sterile distilled water I.V. weekly.
Oxyphenarsine HCl USP "Mapharsen"	3-amino-4-hydroxyphenyl arsine oxide HCl	40-60 mgm. I.V. every 5 days.
Phenarsone Sulfoxylate NNR "Aldarsone"	Sodium 3-amino-4-hydroxy phenyl-arsonate-N-methyl sulfoxylate	1 gm. in 10% sterile water sol. I.V. weekly.
Silver Arsphenamine	Sodium silver-diamino-dihydroxy-arsenobenzene	0.2 gm. weekly I.V. in sterile distilled water.
Sobisminol Mass NNR	Obtained by interaction of sodium bismuthate, triiso-propanolamine and propylene glycol, containing 20% bismuth	0.75 gm. in capsules orally, daily.
Sobisminol Solution, NNR	Sobisminol mass dissolved in propylene glycol, so that each cc. contains 20 mgm. bismuth	2 cc. I.M. twice weekly.
Sodium Iodobismuthite See Iodobismitol	Hydrated sodium bismuth iodide, Na_2BiI_5, with sodium iodide	
Solution Colloidal Mercury Sulfide NNR	Colloidal 2% mercuric sulfide in sterile water, stabilized with protein and 0.2% tricresol	2 cc. I.M. twice weekly.
Sulfarsphenamine USP	Disodium 3,3'-diamino-4,4'-dihydroxy arsenobenzene-N-dimethylenesulfonate	0.4 gm. in 1 cc. sterile distilled water I.M. weekly.
Thiobismol NNR	Sodium bismuth thioglycollate $Bi(SCH_2CO_2Na)_3$	0.2 gm. I.M. thrice weekly.
Tryparsamide USP	p-glycine-amino-phenyl arsonic acid	50 mgm. per kg. I.V. in physiological saline [weekly. Each of first 10 doses preceded by ophthalmoscopy and charting of visual fields.—ED.].

sine hydrochloride ("mapharsen"), which may be considered to be the arsine oxide analogue of arsphenamine. While oxophenarsine is effective in a much lower dose (0.04 gm) than arsphenamine (0.4 gm), it is also proportionately [or *more* than proportionately—ED.] less toxic. Many of the unfortunate arsphenamine reactions have not been as frequently observed with the new drug. Not requiring neutralization before administration, it is as easily prepared for intravenous injection as neo-arsphenamine; indeed, its failure to be rendered more toxic by aeration makes it even easier to prepare than the latter drug.

The pentavalent organic arsenicals are much less toxic than the trivalent compounds. None of them, however, has any significant effect in syphilis. While acetarsone ("stovarsol") was introduced for oral use in syphilis, it has been practically abandoned for this purpose. It is remarkable, however, that tryparsamide is so useful in neurosyphilis. It has no spirocheticidal action. It is of no value in the primary, secondary or tertiary stages of syphilis. Its action is similar to that of high temperature, in that it resolves the perivascular infiltration, which is the chief pathological finding in neurosyphilis, and thus permits a better blood supply to nervous tissue, with resulting improvement in symptoms. If it is used properly, there appears to be no danger that tryparsamide will produce optic atrophy. It has a general tonic effect, and patients gain in weight and in physical condition when under its influence. However, only about half of the paretic patients on whom it is used are improved as a result. Tryparsamide is not nearly as useful in tabes as in paresis. For tabes high temperature therapy seems to be most satisfactory. It is interesting that those paretic patients which fail to respond to tryparsamide often react favorably to high temperature. Tryparsamide therapy is usually effective at a weekly intravenous dose of three grams for eight [to twenty-four—ED.] weeks, with mercury [or bismuth—ED.] salicylate as an adjunct intramuscularly.

Fever therapy of syphilis by induced malaria, although popular, is not therapeutically sound nor safe. [A debatable point.—ED.] There is about a 4 per cent mortality and the malaria infection usually causes a serious physical drain on the patient. High temperature therapy with a special apparatus, or induced simply by wrapping the patient in blankets, is safer and probably as satisfactory.

There is as yet no explanation of the remarkable effectiveness of potassium iodide in tertiary syphilis. There is evidence that the drug alters tissue permeability. It remains one of the most amazingly successful drugs ever introduced for a specific purpose. In resolving the gummata of tertiary syphilis, it may produce what seem to be clinical miracles.

Still more astonishing is the amazing effectiveness of penicillin in syphilis. It is effective in almost every phase of the disease. Dramatic is the response in congenital syphilis in infants. Since there is practically no serious toxicity associated with penicillin, it is safe for physicians to use relatively high dosages in order to be certain of the desired effect. Here is the chance to approach Ehrlich's ideal of a chemotherapeutic agent effective in a single sterilizing dose. It is important to use high dosages in order to achieve effectiveness for another important reason. It is essential to attempt to destroy all the organisms in the body in order to prevent the resistant ones from surviving and thus developing a resistant strain.

The mechanism of action of penicillin is not known with any greater certainty than that which exists for other anti-syphilitic drugs. Since Voegtlin's classic work it is appreciated that the arsenical compounds may act in syphilis by interference with sulfhydryl metabolism. The effective concentration of penicillin in sera for destruction of the spirochete appears to be about 0.08 unit per cubic centimeter. This level may be obtained for a period of two hours following an intramuscular injection of 40,000 units.

Even with the high success of penicillin therapy in syphilis, it is doubtful that the disease will be eradicated. While effective methods of prevention are available, they are almost impossible to apply successfully. Organic bismuth compounds, absorbable on oral ingestion, have been proposed as prophylactics against syphilis. There is no evidence as yet to justify claims for effectiveness. Bismuth therapy in syphilis is usually tried as a substitute for arsenic, when there is possibility of arsenic toxicity or sensitivity. With the introduction of penicillin, there seems to be less need than ever for such drugs. Bismuth, however, is effective either in the elemental form, finely ground in oil and injected intramuscularly, or in various organic and inorganic combinations.

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LEPROSY

There is some hesitancy on my part in discussing the chemotherapy of leprosy, since my experience has been to the effect that leprosy appears to be more important emotionally and politically as a disease than medically or scientifically. Much to my surprise I find that those who are politically interested in leprosy are not particularly anxious to obtain, or at least to support research leading towards, an effective method of therapy or even of prevention.

A great variety of chemicals have been proposed for the chemotherapy of leprosy. It is interesting to observe that as one descends the life scale, from the more complex pathogenic organisms to the simpler less differentiated protozoa and bacteria, the chemicals recommended for effectiveness increase in number. The leprosy organism is a specialized bacterium with a waxy envelope. The reputed success of unsaturated fatty acid derivatives in treating leprosy, such as chaulmoogric, hydnocarpic or gorlic acids and their derivatives and relatives, may be due to the ability of such compounds to destroy the waxy coating of the organism. Various dyes and organometallic compounds, which have been proposed, have been shown on careful study to be ineffective. The success of unsaturated fatty acid therapy depends to a considerable extent on the concentration of unsaturated fatty acid able to be reached in the body. The locally irritating effects of chaulmoogric acid and related compounds make the oral administration of these compounds difficult with respect to the high dosages desired. Various esters, soaps, and glycerophosphates have been derived for intravenous administration, but without striking effect.

It is presumptuous for me to discuss the chemotherapy of leprosy with the distinguished physicians of Hawaii, who have contributed so much to our knowledge in this field. However, the matter is one in which I have been personally interested through a series of research efforts in association with H. H. Anderson and George A. Emerson. We abandoned our efforts when we realized that the disease has such extraordinary political implications.

With the development of the sulfonamides, further advance was claimed in the chemotherapy of leprosy. A sugar derivative of the sulfonamides, "promin," was thought to have some promise of usefulness. Even more recently, streptomycin has been found to be active against the leprosy organism and is being studied clinically. Stimulation of the reticulo-endothelial system, if possible, might be useful in leprosy.

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OTHER BACTERIAL INFECTIONS

In considering the chemotherapy of bacterial infections we might profitably examine the methods of action of various antiseptics. Among physical agents it is to be remembered that moist heat, particularly steam under pressure, remains most satisfactorily effective for sterilization of solutions, instruments and equipment. Ultra-violet light is an important adjunct in maintaining sterility and is coming into wide use. Chemical antiseptics act on cells in a variety of ways. The molecules of the antiseptics cannot tell the difference between the micro-organisms which we may desire to destroy, and the cells of the body which we do not wish to injure. The differential may be improved by taking advantage of the packing of the cells of the body into tissues with secretions, in contrast to the relative discreteness of the individual micro-organisms causing disease. Even if the micro-organisms grow in colonies, they lack the characteristics of packing and secretion which help protect the cells of the body.

The safest of the chemical antiseptics are the oxidizing agents such as hydrogen peroxide, zinc peroxide, potassium permanganate, sodium hypochlorite, chlorine, and the chloramines. Also to be considered in this group are the oil soluble organic peroxides. These agents act promptly; they do not penetrate; their action is over quickly, and it is restricted to the surface. In contrast the metallic antiseptics, chief of which are silver and mercury compounds, act slowly, continuously, and indiscriminately. Their action on tissues is brought to a halt only when they are washed away. The silver or mercury ion is not destroyed. Organic combinations of these ions liberate the ions slowly so that the effect is relatively gentle, but it is to be remembered that these ions always tend to injure the tissues to which they may be applied.

The alcohols, the phenols, the aldehydes, and similar organic compounds act on cells by coagulation of protein in the same manner as silver and mercury ions. However, they also tend to penetrate the cells. They are, however, destroyed in

the process of action. The concentration is important for optimum effect. If the protein precipitating action is too great, there may be such precipitation on the surface of the microbe that no further penetration may occur, and as a result the organism may survive. Thus the optimum concentration for antiseptic action for ethanol is 70 per cent, whereas for isopropanol it is 50 per cent.

Various dyes act by penetration of cells with chemical reactions in the nucleus. These reactions probably destroy essential enzyme systems, thus killing the cell. Important chemotherapeutic developments may result from careful study of the acridines as antiseptics.

The soaps and the cationic detergents are potent antiseptics by virtue of surface tension effects. The development of quaternary ammonium compounds for wetting agents opened a large field for detergent antiseptic action. The most readily available compound of this sort is "zephiran chloride" which is a mixture of various alkyl dimethyl benzyl ammonium chlorides. It is highly effective in a concentration of 0.1 per cent. As a 10 per cent solution it is available under the trade name "Roccal," and of course, can be diluted to an appropriate antiseptic strength. The English have developed cetyl trimethyl ammonium bromide as an effective cationic detergent. These various types of chemicals are used chiefly as surface antiseptics. They are applied locally, and are not ordinarily administered with the hope of absorption and systemic action. However, some of the mild mercurials, such as "merthiolate" can be used for this purpose, as well as such acridine dyes as acriflavine and proflavine. The acridine dyes are readily absorbed from the gut and are excreted in the urine. They are frequently used for urinary antisepsis and are effective in dosages of 100 milligrams.

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SULFONAMIDES

There seems to be good evidence for believing that the development of the sulfonamides was involved in a number of curious commercial and international problems. When Domagh first reported on "Prontosil," in the 30's, as an effective chemotherapeutic agent in hemolytic streptococcal infections, not much attention was aroused. The substance was a complex dye, fully covered by patents, and would obviously be subjected to commercial exploitation. The French chemotherapeutic detectives, under E. Fourneau, studied the new dye and found that it splits in the body to form

Table 2. *Sulfa Drugs*

Name	Chemical Constitution	Dose
Sulfadiazine USP	p-amino-N-2-pyrimidyl-benzene-sulfonamide	Orally: 100 mgms. per kg., initially, and 1 gm. every 4 hours, plus sodium bicarbonate if indicated.
Sulfaguanidine USP	p-amino-benzene-sulfonyl-guanidine monohydrate	Orally: 50 mgm. per kg. every 4 hours.
Sulfamerazine NNR	p-amino-N-2 (4-methyl-pyrimidyl) benzene-sulfonamide	Orally: 3 to 4 gms. initially, and 1 gm. every 8 hours.
Sulfanilamide USP	p-amino-benzene-sulfonamide	Orally: 100 mgm. per kg., and 1 gm. every 4 hours. Parenterally in 1% solution in sterile physiological saline, 1 gm. every 8 hours.
Sulfapyrazine NNR	p-amino-N-2-pyrazinyl-benzene-sulfonamide	Orally: 2 to 4 gms., followed by 1 gm. every 4 hours.
Sulfapyridine USP	p-amino-N-2-pyridinyl-benzene-sulfonamide	Orally: 4 gms., followed by 1 gm. every 4 hours.
Sulfathiazole USP	p-amino-N-2-thiazyl-benzene-sulfonamide	Orally: 4 gms., followed by 1 gram every 4 hours.
Succinylsulfathiazole "Sulfasuxidine"	2-(p-succinyl-amino-benzene sulfonamide)-thiazol monohydrate	Orally: 250 mgms. per kg., followed by 40 mgms. per kg. every 4 hours.

Sterile sodium salt solutions for parenteral use, under NNR regulation, are available for sulfadiazine, sulfamerazine, sulfapyrazine, sulfapyridine and sulfathiazole. The dosage is 50 to 60 mgm. per kg., at 12 intervals, supplemented by oral administration, and controlled by blood level estimations. Neither "prontosil" nor "prontolyn" are included in USP or NNR.

the relatively simple crystalline chemical p-amino-benzine-sulfonamide, which appears in the urine. This agent was found to have the same effects as the more complex dye, and since no patent rights were involved, it immediately began to be studied in France and England. Perrin Long of Johns Hopkins saw some of the English studies and immediately began intensive work on the new agent in this country, with dramatic success.

Sulfanilamide was found to be effective against all types of coccal organisms. Promptly, however, various chemical modifications of sulfanilamide were made, and important differences in action have been found which are helpful in appropriate choice of the sulfonamide compound to be used in the control of a known infection.

At the present time it would appear that sulfadiazine is the drug of choice in hemolytic streptococcal infections, Group A, and also in pneumococcic infections. Meningococcic infections are also best handled by sulfadiazine. On the other hand, sulfathiazole is the sulfonamide of choice in the treatment of gonococcic infections. Sulfadiazine seems best in staphylococcic infections and in infections due to Friedlander's bacillus. Sulfadiazine also seems best in influenzal infections. However, sulfanilamide is the drug of choice in alpha hemolytic streptococcal infections and in chancroid. For bacillary dysentery, the succinyl or phthalyl derivatives of sulfathiazole are most effective, at least on organisms in the intestinal lumen.

Anaerobic streptococcus infections do not respond to the sulfonamides. Furthermore, increasing resistance to sulfonamide therapy appears to be developing on the part of all organisms.

The sulfonamides seem to act by interfering with enzyme systems. In low concentration in the tissues, the rate of multiplication of susceptible bacteria is decreased. In high concentration there may be a direct bactericidal effect. D. D. Woods showed that the sulfonamides may compete with bacteria for such essential metabolites as p-amino-benzoic acid. The sulfonamides may also stimulate phagocytosis. P-amino-benzoic acid will interfere with the action of the sulfonamides, and so will its esters, such as the common procaine type of local anesthetics.

The sulfonamides seem to stick to plasma proteins, but this apparently does not interfere with clinical effectiveness. Most sulfonamides are rapidly absorbed and distributed through the body, and most are quickly excreted in the urine. The insoluble sulfonamides, however, such as the succinyl and phthalyl derivatives of sulfathiazole, are not absorbed. The sulfonamides are related to such common antipyretic drugs as acetanilid. They are detoxified in the body by conjugation with acetic acid. They may be expected to have some of the central depressant action of such drugs as acetanilid.

Toxic reactions to the sulfonamides are common. There may be nausea, vomiting, dizziness, skin rashes, allergic reactions of various sorts, and blood changes. Injury to the kidney may also occur. Great care should be taken in the administration of the sulfonamides to watch for toxic effects, so that the drug may be stopped promptly in order to prevent injury. It is important always to maintain high urinary output. Sulfamerazine is more soluble in urine (as well as more slowly excreted) than other sulfonamides, and drug concretions and renal injuries seem to be less likely to occur with it. The administration of sodium bicarbonate may assist in preventing the renal complications from the use of the sulfonamides.

For maximum sulfonamide effectiveness it is necessary to have blood concentrations in the neighborhood of 12 to 15 milligrams per cent. The blood concentration of the sulfa drugs may readily be estimated by the method of Bratton and Marshall (*J. Biol. Chem.* 128: 537, 1939). Since the drug leaves the body within four to six hours after absorption, it is necessary to repeat the dosage at this interval. Initial oral doses are usually in the neighborhood of 100 milligrams per kilogram body weight with subsequent administration of about 1 gram every four hours. Intravenous administration is reserved for serious situations, and here the sodium salt of the corresponding sulfa drug is used for making appropriate sterile 5 per cent solutions. The intravenous dosage is usually 50 mgms. per kilo, repeated at four hour intervals and supplemented by oral administration. Sulfonamide crystals may be used locally, by direct application, but absorption should be expected from exposed surfaces.

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ANTIRICKETTSIALS

Between the viruses, which have characteristics both of non-living and of living material, and bacteria, which exhibit all of the usual properties of living things, are the rickettsia. These are essen-

tially intracellular bodies, which seem to grow at the expense of the cells in which they lodge. It seems now to be apparent that whenever the general metabolic activity of cells containing rickettsia diminishes, the rickettsia flourish and the cell goes to pieces. On the other hand when the usual metabolic activity of the cell is operating smoothly and effectively, with a general increase in cellular well-being, the rickettsia tend to disappear from the cell which they may have invaded. When the cellular metabolic gradient is upwards, rickettsia tend to die out. When the cellular metabolic gradient is downwards, rickettsia tend to increase within the cell.

A very significant feature of chemotherapy has recently developed in taking advantage of these general factors involving rickettsial growth. Greif and his associates observed that p-amino-benzoic acid will tend to promote cellular metabolism at the expense of rickettsia growing within the cells. On this basis the administration of p-amino-benzoic acid (PABA) was proposed for typhus. Anigstein and his associates found that PABA is effective in experimental spotted fever. It has now been found to be clinically useful in typhus, spotted fever, and other rickettsial diseases.

It may very well be that PABA promotes cellular metabolism, and that it specifically competes with enzymes necessary for the growth of rickettsia. On the other hand, various derivatives of PABA also seem to be effective. Some of these derivatives are sulfa drugs, such as p-sulfonamido-benzamidine, recently introduced by Andrews and his associates. It is interesting that the sulfa drugs themselves are of no value in rickettsial diseases. It is to be remembered that the sulfa drugs are antagonized by PABA. Experimental observations suggest that the sulfa drugs actually increase the growth of rickettsia within cells.

More effective of course than chemotherapeutic measures in rickettsial diseases are preventive measures, particularly designed to destroy fleas, ticks, and mice. DDT and other insecticides are of great value in this regard.

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ANTIBIOTICS

It is often amusing to note how long established folk-lore in regard to medical affairs is often based on shrewd observation and experience. The ancient Egyptians for example recommended moldy bread crumbs for application to skin abrasions. The universal primitive belief in the efficacy of excreta for skin involvement is explainable on the basis of bacteriophage action. With the extraordinary development of bacteriology in the nineteenth century, it is surprising that someone did not think of the possibility that molds used in cheese-making destroy the bacteria found in the milk. However, even Pasteur overlooked the significance of his observation on the inhibition of bacterial growth by grape-molds. It is worth considering that the well studied bacteriophage may be taken as an example of an antibiotic. The remarkable work of F. H. d'Herelle on the bacteriophage deserves restudy in relation to our current knowledge of the antibiotics.

PENICILLIN

It is interesting that Fleming's recognition of the bacteriolytic activity of extracts of Penicillium notatum should have been neglected for so long. The essential information about penicillin, named by Fleming, was established by him in 1929. After several years' effort, Chain and Florey could report on a crude purification of the active principle with a method for assay. It was the military urgency and American mass production know-how which made possible the amazing clinical applications of penicillin.

Penicillin is extracted by organic solvents from cultures of penicillium grown in flasks or tanks on media containing corn steep liquor. There has been an unfortunate amount of secrecy and confusion regarding the chemistry of the active product. As now believed, there are several penicillins, which develop together in natural culture. These are known as penicillin F ($C_{14}H_{20}O_4SN_2$), the 2-pentenyl derivative, prepared from flask cultures; G ($C_{16}H_{18}O_4SN_2$), the benzyl derivative, formerly predominant in commercial mixtures, prepared from submerged tank cultures; X ($C_{16}H_{17}O_5SN_2$), sometimes called allopenicillin, the p-hydroxybenzyl derivative, prepared from superficial tank cultures; and K ($C_{16}H_{26}O_4SN_2$) being the n-heptyl derivative, predominant, apparently, in the newer commercial mixtures.

The commercial preparations of penicillin are yellowish, due to impurities. The substances occur usually as the crystalline sodium or calcium salts,

but the methyl and other esters are also available. The penicillins are labile and deteriorate rapidly in the presence of moisture, acid, or warmth.

The standardization of commercial penicillin is made by estimating the amount which, when dissolved in 50 cc. of meat extract broth, will just inhibit the growth of a standard test strain of Staphylococcus aureus. This Florey unit equals 0.6 micrograms of the ordinary mixed crystalline penicillins. This is inexact, however, since allopenicillin is the most active of the forms so far identified, and the K form is the least. Commercial preparations vary in the amounts of the respective individual penicillins.

The absorption, distribution, and excretion of penicillin are important to understand in relation to effective administration and action. Penicillin is destroyed by the acidity of the gastric juice, but this can be prevented by giving at the same time a protein such as egg white, or antacids such as aluminum hydroxide or calcium phosphate. However, absorption from the alimentary mucosa is slow and it takes three to five times the parenteral dose for equal effectiveness.

Administration is usually by intravenous or intramuscular injection of sterile aqueous solutions. Intrathecal administration is indicated in meningitis. In order to prolong a high blood level and thus prolong effect, absorption from intramuscular injection may be delayed by the use of such vaso constrictors as epinephrine or by incorporating the penicillin in beeswax and peanut oil.

More than half the administered penicillin is excreted unchanged in the urine. The rate of excretion is rapid and depends upon the dosage and route of administration. Penicillin K is most rapidly destroyed in the body or excreted. Decreased excretion may be obtained by depressing tubular elimination by diodrast or p-amino-hippuric acid. Taking 0.156 unit per cc. of blood as the effective level, 5,000 units of penicillin intravenously are active for only about 30 minutes, while 40,000 units intramuscularly are effective for about 180 minutes.

The action of penicillin is primarily bacteriolytic against gram positive organisms. Penicillin may be painful in high concentration on abraded areas. As a local antiseptic, penicillin may be active in dilutions of 1 part to 5,000,000, while gentian violet is active in dilutions of 1 to 800,000 and zephiran in dilutions of 1 to 40,000. For systemic antibacterial activity against gram positive organisms and syphilis, dosages should be in the neighborhood of 30,000 units in 30 cc. every three hours intramuscularly, or 10,000 units in 250 cc. of sterile saline solution per hour by intravenous drip. It takes about 30 milligrams to cure gonorrhea. About 10^6 molecules of penicillin are required to inhibit one streptococcus in comparison to 10^{10} molecules for sulfanilamide.

Penicillin apparently acts by inhibiting the reproduction of bacteria by combining with some enzyme sulfhydryl group and by inhibiting the tissue respiration-carbohydrate cycle of the bacteria. Penicillin is not destroyed in the reaction. Penicillin can be inhibited by sulfhydryl compounds. Some synergism exists with sulfonamides. However, drug resistant strains of organisms develop, as a natural consequence of survival of more resistant organisms when the full dosage required for destruction is not given. Some bacteria possess an enzyme which destroys penicillin.

Some toxic effects from penicillin may be observed with high dosages. There may be increased coagulability of the blood with thrombin formation. Some 3 per cent of patients may show delayed allergic reactions. Penicillin may induce a severe Herxheimer reaction on the initial dose in syphilis.

Penicillin is effective in all infections due to staphylococcic, clostridial, pneumococcic, gonococcic, meningococcic, and hemolytic or anerobic streptococcic organisms. It is also effective in anthrax, diphtheria, rat-bite fever, and syphilis.

STREPTOMYCIN

In 1944 S. Waksman and his associates grew Streptomyces griseus and isolated an active antibiotic from it which was called streptomycin. The active agent was crystalized the next year and its chemistry determined by the research workers of Merck and Company. Streptomycin ($C_{21}H_{37}O_{12}N_7$) is a glycoside of a hydroxylated base and a disaccharide. It is extracted by organic solvents from cultures grown on beef extract or corn steep liquor. The crystalline material as well as the aqueous solutions are stable.

Streptomycin is standardized in accordance with the "Waksman unit," which is that amount of streptomycin which will inhibit the growth of a standard strain of E. coli in 1 cc. of nutrient broth. It is also defined as one microgram of the pure base. The hydrochloride salt contains 800 units per milligram.

Streptomycin is not destroyed in the gastrointestinal tract, but neither is it absorbed from it. Accordingly it requires parenteral and sterile administration. It is rapidly distributed to all parts of the body on intravenous administration, and maximum blood levels are reached from intra-

muscular injection within thirty minutes. Three-fourths of the administered streptomycin is excreted unchanged into the urine in 24 hours. Some may be conjugated with cysteine. Effective blood levels of 5 to 20 units per cc. may be maintained by repeating intramuscular injections of 250 milligrams every six hours.

Streptomycin is locally active as a bactericidal agent against gram-negative wound infections. Systemically, streptomycin is primarily active against gram-negative organisms. It requires about 5 times 10^6 molecules to inhibit one E. coli organism. It apparently acts by combining directly with some essential factor in the organism, and it is destroyed in the process. The less rapid the growth of the organism, the more effective is streptomycin. Like the sulfonilamides, but unlike penicillin, streptomycin is inhibited by peptone. Streptomycin seems to act by combining with sulfhydryl compounds, which also will antagonize its effects.

Toxic reactions occur quite frequently with streptomycin. There may be a fall in blood pressure. Fainting and acute headache occur in more than 10 per cent of patients. There may also be dizziness and nausea. These reactions may be due to histamine-like impurities.

Streptomycin seems to be of particular value in urinary tract infections from gram-negative organisms. It is useful in tularemia, and in pneumonia due to Friedlander's bacillus. It is helpful in meningitis due to gram-negative organisms, and in salmonella infections. It also appears to aid in Weil's disease, relapsing fever, tuberculosis, and leprosy. It is not useful in human typhoid or undulant fever.

TYROTHRICIN

Dubos has isolated an antibiotic fraction from Bacillus brevis, a gram-positive, spore-forming, aerobic soil organism, which contains two substances, gramicidin and tyrocidin, the former being the more active. The name given to the mixture is tyrothricin. This antibiotic mixture is too irritating and toxic for systemic action, but is useful for local application to infected skin areas, such as indolent ulcers and wounds. It is not successful against gram-negative organisms. Tyrothricin is best applied locally in sterile isotonic salt solution in a concentration of 500 micrograms per cc. Higher concentrations may be irritating.

Many molds, yeast, and other small organisms, and also some plants, yield antibiotics of various activity and interest. None of these have yet come to significant clinical application. However, it is to be anticipated that important new developments in the antibiotic field will occur as a result of the chemical identification of active agents and resulting efforts to synthesize significant chemical relatives.

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BIOLOGICALS

The great success of the sulfonamides and the antibiotics in the past few years has resulted in a remarkable decrease in interest and use of vaccines and serums. However, continued advance is being made in the development of these important agents for the prevention and treatment of disease, and new and improved vaccines are continually being made. One of the most recent to obtain popular interest is a proposed sero-immunological preparation for polio.

The best discussion of serums and vaccines from the standpoint of chemotherapeutic use is in *New and Non-Official Remedies.* Physicians are fortunate in having the full protection of federal law with regard to the regulation of the manufacture and distribution of viruses, serums, toxins, and analogous products. The standards established by the United States Public Health Service, under a strict licensing system, assure physicians that only the best products are prepared and allowed to be marketed.

Biological products may deteriorate rapidly. They must be preserved in cold storage, and they should not be used following the expiration date. It is important to remember that most biological products contain some antiseptic agent as a preservative. Frequently 0.5 per cent phenol is used or a small amount of some organic mercury compound. Reactions to biological products are not uncommon, due to sensitivity of individuals to the serum of the animal used. Reactions may usually be handled by the administration of epinephrine [or Benadryl or pyribenzamine—Ed.].

The biologically effective agent in serums and vaccines is apparently a globulin protein. Research in this field is rapidly progressing, and Pauling has offered evidence regarding the artificial production of immune serums by modifying the phys-

ical structure of neutral globulins through contact with appropriate antigens in the test tube.

Physicians will do well to remember that the various immune serums, antibacterial serums, naturally produced antibodies (such as human scarlet fever immune serum), virus or bacterial vaccines, or bacterial toxins, may be successfully used with the sulfonamides or the antibiotics in the treatment of various bacterial infections. More importantly, however, the serums and vaccines offer the most effective individual aid in the prevention of disease. It is also important to remember that many biological products are used for diagnostic tests in sensitized patients.

SUMMARY

The field of chemotherapy is expanding rapidly. Basic screening tests of proposed new agents must be conducted in accordance with sound pharmacological principles. It is important for physicians to be well acquainted with the details of various methods for estimating the "therapeutic index," in order to be able to judge properly whether or not a newly proposed chemotherapeutic agent is meeting reasonable tests of its claimed effectiveness. Chemotherapeutic agents have been successfully developed for all types of parasitic or disease producing organisms. The successful use of chemotherapeutic agents requires high skill and judgment on the part of the physician, in order to maintain an effective concentration without producing untoward reactions in the patient. Under no circumstance is routine use of a chemotherapeutic agent warranted. Choice of chemotherapy, dosage, and administration should be carefully considered in relation to the specific conditions of individual patients.

An Analysis of The Queen's Hospital Diabetic Clinic

III (Conclusion)

THE SOCIAL WORKER'S DATA

VIRGINIA C. OTT HERBST, M.S., MORTON E. BERK, M.D., and LILLIAN ELSHOLTZ PAGE, M.S.
HONOLULU

THE DIABETIC CLINIC at The Queen's Hospital offers specialized treatment, i.e., medical, dietary, and social casework, to diabetic patients so that they can learn to live as normal lives as possible.

An individual with diabetes, in addition to meeting the demands of every-day life, must learn to live with a chronic illness. The degree to which he is able to do so is dependent on a variety of factors within himself and his environment. The ability of any diabetic patient to live with his illness with a minimum of difficulty is partially determined by his attitude toward his illness and the resources he has within himself to meet its demands. If a patient is to follow the prescribed diabetic regimen adequately it means, generally, that he has to restrict his diet, do a daily urinalysis, and give himself daily injections of insulin. Routine check-ups are essential to assure close supervision and to allow for revision of the regimen when necessary. These are comparatively simple procedures, but they are *in addition to* the regular routine of living. These may not seem difficult, yet most such patients need some help before they are able to carry them out.

Why does the diabetic patient need help and in what ways can assistance be rendered? Each person has an emotional reaction to the discovery that he has a chronic illness. At first there is usually fear and anxiety about what changes in living will be necessary. Sometimes the accustomed manner of living must be changed considerably; sometimes there is a concrete economic problem in relation to diet. For the juvenile diabetic patient, whose disease is often severe, the necessary changes in manner of living, constant dietary restriction, the concentration of attention on his own health, his own worry about himself and his natural fighting against it may mean added problems and burdens. In these emotional and social areas the case worker functions as the third part of the team of doctor, dietitian and social worker.

A few illustrative cases have been chosen. The first concerns a patient who was more articulate than most about his feeling when told he had diabetes. He told the social worker quite clearly that it takes time to accept oneself as different from before. He used the social worker over a period of time for support to get a more comfortable feeling about his illness and a better understanding of it. Then when he was discharged from the hospital he was able to follow the medical recommendations with regularity.

CASE 1.—J.A., a 43 year old Caucasian light-house keeper from Hawaii, was hospitalized with a diagnosis of diabetes mellitus and coronary heart disease. The attending physician referred Mr. A. to the Diabetic Clinic for management. In preparation for clinic attendance he was seen by the social worker while still a hospital patient. The doctor felt that the patient was intelligent and very much interested in learning more about his diabetes. At that time he had not yet learned to do a urinalysis or to give himself insulin.

When the social worker went to see him she found him reading a pamphlet on diabetes. When asked how much he knew about the disease he replied that the doctor had spent considerable time talking to him about diabetes but he added that the medical terminology had "stumped" him. He indicated interest in talking it over further and frequently would paraphrase what the social worker said as if to fix the explanation more clearly in his mind.

"My aunt and my father-in-law had diabetes. . . . When I found out I had it too, I just couldn't believe it. I have never had to be on a diet, have always had a 'strong stomach' and I have always been well. It took me a while to realize that there was something wrong and a lot longer to finally admit to myself that I had diabetes, a disease which is going to stay with me always probably and which I will have to get used to. . . . I suppose that it isn't so bad because it is something that I can find out about and I can learn to take care of myself. As you say, it isn't painful and it seems to me about the easiest kind of sickness to have if you have to have something. I told the doctor at first if I had to have something wrong I wish I could have had an operation or something that I could get over with eventually. But since I'm feeling so much better now and know what is wrong I know what to do about it. Of course it is going to be inconvenient but I live pretty much by myself and do my own cooking. With a chance to talk over these questions that I have in mind, I am really not so worried about what happens next."

Mr. A. was getting a good start by accepting this chronic illness. He readily learned to do the urinalysis and insulin injection. Discussion with the dietitian about preparation of his diet resulted in plans being worked

Parts 1 and 2 of this article appeared in the September-October, 1946 issue.—ED.

In Part 1, Fig. 4, for "black block" read "white block."

out by the social worker so that he could do his own cooking for a trial period before returning to the other island. He attended the clinic as an outpatient and made favorable progress. The continued clinic instruction and the application of knowledge to his illness made it possible for this patient to take care of himself adequately outside the hospital.

Since children frequently have severe diabetes, it is important for them to learn early to take care of themselves; this can only be done with the complete understanding and cooperation of the family. Of the 232 clinic cases there were 9 patients under sixteen years of age.

TABLE 1. *Correlation of Social Worker Contacts with Dietary Control and Attendance*

Medical Social Worker's Interviews With:	DIETARY CONTROL								REGULARITY OF CLINIC ATTENDANCE					
	Very Satisfactory	Satisfactory	Fairly Satisfactory	% Dietary Control	Uncooperative	No Contact	% Uncontrolled	Total	Regular	½ - ¾	% Attending Regularly	Less	% Attending Irregularly	Total
Patient only	14	28	8	75%	8	8	25%	66	37	14	77%	15	23%	66
Patient and family	5	10	9	78%	5	2	22%	31	13	8	69%	10	31%	31
Patient, family, social, and/or health agency	0	18	12	81%	7	0	19%	37	13	12	68%	12	32%	37
Patient only and social or health agency	4	22	22	76%	7	8	24%	63	28	17	87%	18	13%	63
Family only	0	0	0	0%	0	2	100%	2	1	0	50%	1	50%	2
No contact	1	4	9	42%	7	12	58%	33	3	6	27%	24	73%	33
Total	24	82	60	72%	34	32	28%	232	95	57	66%	80*	34%	232

* This number also includes those patients who came for one time.

The next case illustrates another aspect, that of relieving emotional tension.

CASE 2.—M.G., an intelligent 64 year old spinster, was referred to the Diabetic Clinic by her doctor for management. In addition to diabetes, she had a severe cardiac condition which necessitated hospital care several months prior to her initial visit to the Diabetic Clinic. For many years she and her sister had lived together; the latter died and following Miss G.'s hospitalization the doctor did not feel that she should live alone. A young pregnant woman who needed a place to stay agreed to move in with the patient. This arrangement worked out satisfactorily for a limited period but Miss G. felt that after the infant's arrival she could no longer provide a home for both the mother and the baby. There was considerable difference in temperament, cultural background and age which resulted in constant tension in the home. This increased as time went on and the dissatisfaction and friction were reflected in Miss G.'s physical condition. Her blood sugar went up; so did her blood pressure. It was obvious that if this patient was to become stabilized as far as her diabetic condition was concerned some change in living conditions would have to be made at once. The social worker was able to find a resident job for the companion so that she could live with her baby and thus she moved out of Miss G.'s home. Within the week the patient's blood sugar decreased and her outlook on life greatly improved. This improvement has continued and her diabetes is now satisfactorily regulated.

CASE 3.—L.M., a 14 year old Caucasian school girl, came from a cultured, intelligent family. Both of her parents were professional people. She was the third of four children. She went to a private school, made better than average grades, was popular in her class and participated in many school activities. She was first referred to the Diabetic Clinic by the attending physician in 1942. It was felt she would gain increased knowledge of her diabetes through contact with other children her own age who had the disease. She has been fairly well controlled except for an occasional dietary indiscretion or upper respiratory infection. Mrs. M. was extremely conscientious about the patient's diet. She tried not to overemphasize L.'s illness but constantly warned her about not eating when she was out with friends, reminded her about taking her insulin and doing her urinalysis. Finally the patient, who had been very careful most of the time, began overeating, forgetting to do her urinalysis, and showing rebellion against her illness in other ways. Her mother became alarmed and discussed the girl's behavior with the doctor and social worker. Throughout L.'s contact with the clinic the social worker had seen her at intervals and maintained a friendly relationship with the girl. It was possible, therefore, to institute with her (the family and doctor sharing in the plan) an interesting program for the summer. L. had said in the past that she thought she might like to be a dietitian. With this indicated interest the social worker made plans for organized summer activity so that she would be a "student helper" in the dietary department of the hospital,

where her interest in diet would not be turned toward herself but to others who have dietary problems. The social worker had talked with the family about some of the reasons why L. needed to rebel. With this understanding their attitude became more sympathetic. With the institution of the above plan L.'s diabetic regulation immediately improved.

Here was an intelligent, well-meaning family whose anxieties were reflected in the patient's rebellion.

The last case shows a child's attachment to a former doctor and the help which the boy and his family needed in transferring his allegiance before medical treatment could proceed.

CASE 4.—L.F. was a 12 year old school boy of Portuguese descent who recently moved from rural Hawaii to Honolulu. The family lived with in-laws and the house was greatly overcrowded. While on Hawaii L. was under the care of the plantation physician. The boy became so fond of the doctor that he spent more time at the hospital than he did at home. It was therefore difficult for him to adjust to a new community, new school, new associates, a new way of living and, most of all, a new doctor. It was the physician to whom the family had gone upon arrival in Honolulu who referred the boy to the Diabetic Clinic. This doctor thought that because of the boy's severe diabetic condition every effort should be made to encourage the family to provide regular medical supervision, which they had not been doing. The social worker made a home call to discuss the clinic facilities with the patient's mother and the boy himself. Having learned of the boy's attachment to the doctor on the other island, it seemed important to give the family the feeling that the Diabetic Clinic could be a substitute for that very satisfying relationship which they had had with their first doctor. To help make this transfer the doctor in the clinic was informed in advance of the background so that he could be especially attentive to the boy during his early experiences with the clinic. The result was that the patient came to look forward to clinic appointments. With the exception of a serious dietary indiscretion occasioned by his birthday celebration, L. has been able to follow the doctor's recommendations by himself. He is an attractive, intelligent, alert child now making a good school adjustment and proving that he can follow medical advice.

The following tabulation was made in an effort to determine whether those persons who had help in social and emotional areas fall more consistently in the well controlled group and whether those persons who have had none fall consistently in the poorly controlled group. (See Table 1.)

COMMENT

According to these figures 75 to 81 per cent of the group followed by the social worker showed fairly to very satisfactory diet control; 68 to 87 per cent of this same group showed regularity of clinic attendance.

Only 42 per cent of the group not followed by the social worker were fairly to very satisfactorily controlled and only 27 per cent were regular in clinic attendance.

CONCLUSION

Although the number of cases studied was small and is weighted (there is a greater number who were followed by the social worker than were not), the figures would suggest that there is a correlation between good control (the tangible evidence of the condition of the diabetic) and the case worker's activity in social and emotional areas.

The case material presented and chosen as representative indicates the same.

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Influenzal Meningitis

REPORT OF TWO CASES, ONE COMPLICATED BY BRAIN ABSCESS

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THE TREATMENT of meningitis caused by Hemophilus influenzae has undergone two remarkable changes in the last few years, the first of which was the establishing of a specific antibody for treatment of this previously deadly infection. Sulfadiazine and specific rabbit anti-serum have been used with success for the last five years.

Wilkes, Weiss and Huntington in 1936 reviewed 500 reported cases and found a mortality of 97.6 per cent under the age of 2 and 79.5 per cent over the age of 2. Fathergill reported, in 1937, 201 cases of H. influenzae meningitis treated with horse anti-serum, the death rate being 84.6 per cent. Horse serum antibody proved ineffective and caused severe reactions.

Pittman and Alexander attempted to evaluate, by means of mouse protection tests, the relative efficiency of sulfanilamide, sulfapyridine and sulfadiazine. Sulfanilamide was found least effective, sulfapyridine next and sulfadiazine most effective. Penicillin has been reported ineffective on numerous occasions against Hemophilus influenzae, which is gram negative. Sako, Stewart and Fleet reported 13 cases who received sulfadiazine only. Eleven cases recovered; two infants under six months died.

Alexander in 1939 successfully prepared a potent rabbit serum against H. influenzae, type B. She reported results of treating 50 patients with sulfonamides and rabbit serum, the mortality rate being 17 per cent in infants over 7 months and 75 per cent in infants under 7 months.

Smith, Wilson and Hodes reported in the *Journal of the American Medical Association* for February, 1946, that all of the proved cases of influenzal meningitis admitted to Sydenham Hospital, Baltimore, following January, 1941, at which time the Baltimore City Health Department and Maryland State Health Department made specific rabbit serum available to all patients regardless of their financial status. Twenty-eight cases in all were reported with the remarkable record of 7 per cent mortality. The two deaths were in infants, nine months of age. Twenty-seven were H. influenzae, type B. In one case the type of H. influenzae could not be determined. Type B is reported to be most severe, and commercial serum is made for type B only. Their method of treatment was to give sulfadiazine in large doses and to maintain a blood level of 8-12 mg. per 100 cc. during the illness and for two weeks after apparent cure, because of the well known tendency of patients with influenzal meningitis to relapse. Specific type B rabbit anti-serum was given as soon as the diagnosis was made, and 150 mg. of antibody was given immediately intravenously. Subsequent dosage of anti-serum was determined by assaying each day varying dilutions of the patient's own serum against a subculture of organisms originally recovered from his own spinal fluid. Sufficient serum was administered so that a patient's own serum in a dilution of approximately 1:16 produced capsular swelling of the cultured bacilli. The average case required a total of 250 mg. of anti-body. Here the anti-body costs $30.00 wholesale for each vial of 25 mg., or a cost of $300 for the average patient for anti-serum. The use of rabbit serum is not without danger: severe reactions frequently occur. The most alarming is the immediate anaphylactoid reaction consisting of fever, cyanosis, wheezing and apneic breathing. Serum sickness is the most common reaction, appearing seven to twenty days after serum administration.

An analysis of cases admitted to the Children's Hospital shows ten cases of influenzal meningitis in 1943, one case in 1944 and one case in 1945. The ten cases in 1943 represent a small epidemic for this locality, for which no explanation can be given. All cases were diagnosed by culture of the spinal fluid. All of these patients died except one three-months-old child who was admitted to the Children's Hospital on June 22, 1943 with a history of convulsions and diarrhoea for two weeks. The child was very emaciated and cyanotic on admission. He was given moderate doses of sulfadiazine and after a very stormy course, was discharged on the fifteenth hospital day with temperature normal. Two spinal fluid cultures were positive for H. influenzae. The only thing that makes one suspect this may not have been H. influenzae but some other gram-negative bacillus, was the fact that the organism grew well on Löffler's medium as well as on clear chocolate agar medium. It is characteristic of H. influenzae that

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it does not grow on Löffler's medium but grows readily on chocolate agar. The private physician was contacted and reports the child living and well as far as he knows. The remaining 12 patients, ranging in age from 3 months to 2 years, died after a hospital stay of from 1 to 86 days. A typical case report illustrates the long-drawn-out illness.

CASE REPORT

A one year old Caucasian boy was admitted to the Children's Hospital on September 21, 1943 with a history of high fever, chills and rigid neck for two days. Examination revealed a well-developed child, whose lungs were clear. Ears, nose and throat were normal; the neck was rigid. Kernig's sign was present. Spinal fluid showed heavy pus, and culture was positive for H. influenzae. Blood culture was negative. Sulfadiazine was started. (Penicillin and rabbit serum were unavailable at that time.) Heavy pus was removed in spinal fluid and culture was positive at every spinal tap until death two months later. He ran a daily temperature of 103° F., and developed athetoid tremor of extremities. Two weeks before death, he developed stupor and spastic rigidity of upper extremities, severe muscle wasting and inability to eat. The spinal fluid became so thick and fibrinous that it could not be sucked out with a 20 gauge needle. He was kept alive for two months with sulfadiazine.

COMMENT

In reviewing this case, I know that his sulfadiazine level was 2.5 mg. to 8 mg. per cent. He was started on sulfadiazine in adequate dosage, and then dosage was reduced because he developed edema of extremities and showed small amount of albumin in the urine. Also, in reviewing the other cases in this series, a few of which had sulfadiazine level determinations, all were inadequate for cure of this disease—ranging from 2.2 to 8 mg. per cent. It is difficult to feed sulfadiazine by mouth in many of these cases. Our treatment of H. influenzae meningitis with sulfadiazine has yielded very poor results. Our results with sulfadiazine and rabbit serum, which is now available, should be much better.

CASE REPORT

The first case treated with specific rabbit serum entered the Children's Hospital on January 21, 1946 with a history of fever and cold at home for two days and twitching of fingers and convulsions for one day. Examination revealed no stiffness or tenderness of neck. The lungs were clear and the reflexes hypoactive. Eardrums were slightly inflamed and the temperature was 103° F. Tentative diagnosis: otitis media and acute upper respiratory infection. This normally developed one year old male was given 5,000 units penicillin every three hours. Next day the temperature was still 103° and the neck was stiff. Spinal fluid was turbid and culture revealed good growth of H. influenzae on clear chocolate agar. Sulfadiazine, 0.5 grams every four hours, was started. Quellung reaction with type B serum showed swelling of bacilli.

In consultation with Dr. Frank Gaudin, he advised rabbit serum if available. There was no serum available at the hospital, and none could be located in Honolulu, as it was Saturday afternoon. Next morning a salesman was located and obliged by delivering Lederle's rabbit serum to the Children's Hospital. Two ampules, or 50 mg. antibody, were given intravenously, and 50 mg. repeated intravenously on the third hospital day. Blood sulfadiazine level was 10.75 mg. per cent on the fourth hospital day. On the fifth day the face and hands were slightly swollen and sulfadiazine was decreased to 0.25 gram every four hours. Fifty mg. more antibody was given on the fifth hospital day, but only by cutting down on a vein. The patient immediately began chilling and became cyanotic and apneic. Five cc. 1:1000 adrenalin was given. The temperature rose to 106° F. and the patient almost expired. No further rabbit serum was given after this reaction and the difficulty with the veins. He received only a total of 150 mg. of antibody, which is not an adequate dose. Smith, Wilson and Hodes report two cases cured by giving the rabbit serum intramuscularly. This method should be used more often as it is easier to administer and obviates the serious reactions.

The child continued to run a stormy course with stupor and convulsions. His blood sulfadiazine level dropped, and he could not take sulfadiazine by mouth. He was given 5 per cent solution of sodium sulfadiazine, 10 cc. every four hours subcutaneously at the suggestion of Dr. Gaudin, and his condition improved. The patient continued to improve and was discharged as well on February 28, 1946, the thirty-fifth hospital day. The patient was seen at weekly intervals and seemed to be getting along well and had no elevation of temperature.

On April 1, 1946 the patient was admitted to the hospital again with a temperature of 102° F. and flaccid paralysis of the left arm. He had no convulsions, but had slight twitching of the hands. It was felt at this time that he had a brain abscess, and Dr. Cloward made an opening in the skull and removed a large amount of thick pus which showed H. influenzae on culture. The abscess cavity was irrigated post-operatively and subsequent cultures have been negative. He can now move both arms and his temperature is normal. He appears to have made a complete recovery. His spinal fluid was always negative for organisms after the first rabbit serum administration, but he must have had a walled-off pocket of pus in the brain which did not communicate with the spinal fluid. Brain abscess is a rare complication of influenzal meningitis.

STREPTOMYCIN

The new antibiotic streptomycin, which is now available in limited quantities, will probably become the treatment of choice for H. influenzae meningitis. Dr. Hattie Alexander[1] reports the use of streptomycin in 25 cases of influenzal meningitis. When the infection was of mild or average severity streptomycin alone brought about com-

[1] Alexander, H. E.: Streptomycin in Pediatrics, J. Pediat. 29:192 (Aug.) 1946.

plete recovery. Three of the patients with severe infections died with streptomycin therapy plus rabbit anti-serum after four days of unsuccessful streptomycin therapy. The failure of streptomycin to eradicate the infection in these fatal cases was due to emergence of resistance of the infecting strains, as demonstrated by in vitro tests of cultures obtained from the patient's spinal fluid. The schedule of therapy with streptomycin: 20,000 units per pound of body weight was introduced by intramuscular route daily. This was given in eight doses at 3 hour intervals in a concentration of 50,000 units, or less, per cc. The drug was also administered intrathecally to all patients daily, the dose varying between 25,000 and 50,000 units depending upon the severity of the infection.

Dr. Alexander's summary of treatment is as follows:

1. Streptomycin alone in any type of H. influenzae meningitis of mild or average severity.
2. Streptomycin plus sulfadiazine in all severe H. influenzae meningitis of other than type B.
3. Streptomycin, sulfadiazine, and rabbit antiserum in all severe type b H. influenzae meningitis.

Nussbaum, Goodman, Robinson, and Ray[2] report successful treatment of 3 cases of H. influenzae with streptomycin and sulfadiazine.

Birmingham, Kaye and Smith[3] report 8 cases of H. influenzae meningitis treated with streptomycin. Four recovered, 3 died, and in one, therapy was given up in favor of sulfadiazine and rabbit serum.

Dr. Joseph Palma[4] reports the recovery of a case of H. influenzae meningitis treated with streptomycin.

The conclusions are that streptomycin is effective against H. influenzae in vivo and in vitro and will cure mild cases unaided. Streptomycin, sulfadiazine and rabbit serum, all started as soon as diagnosis is made, should be used for severe cases of H. influenzae meningitis.

CONCLUSIONS

Meningitis caused by H. influenzae is a very serious disease, especially in children under one year of age.

Prompt diagnosis is necessary and adequate doses of streptomycin, plus sulfadiazine and rabbit serum in severe cases, must be given as soon as the diagnosis is made.

Adequate rabbit serum may be given by intramuscular route as well as intravenously.

Adequate sulfadiazine may be given as a 5 per cent solution of sodium sulfadiazine, subcutaneously.

Relapse or permanent brain damage may result from influenzal meningitis.

A case of influenzal meningitis complicated by brain abscess is reported.

[2] Nussbaum, S.; Goodman, S.; Robinson, C.; Ray, L.: Report of 3 Cases Treated with Streptomycin and Sulfadiazine, J. Pediat. 29:14 (July) 1946.

[3] Birmingham, J. R.; Kaye, R.; Smith, M. H. D.: Streptomycin in Treatment of Influenzal Meningitis, J. Pediat. 29:1 (July) 1946.

[4] Palma, J.: Hemophilus Influenzae Meningitis with Recovery: Report of Case Treated with Streptomycin, Proc. Staff Meet. Clinic, Honolulu, 12:173 (June) 1946.

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[EDITORIALS]

BOOST THE H.M.S.A.!

Think these statements over . . . carefully:

"The public relations of any group are determined by its conduct, and only in response to enlightened conduct, properly publicized, can there be a favorable reaction."

". . . the manifold activities of the American Medical Association in various fields of medical science have become largely lost to public view and as a consequence the Association has become widely regarded as primarily concerned at this time with the economic interest of the doctor."

"Now . . . the Association has adopted a *positive* national health program, including a *nationwide distribution of medical care* based on the *voluntary insurance system* and . . . this is its greatest potential asset."

These statements are from the July 20, 1946, issue of the *JAMA*. They are from the report of the board of trustees on the survey of AMA public relations made by a firm of public relations experts—the so-called "Rich report."

Paraphrasing the report of the public relations firm, the board's report also says: "It is his further opinion that *extension of adequate medical service* is unquestionably the most urgent task for organized medicine today . . ."

It is apparent, on the national scene, that the threat of the Wagner-Murray-Dingell bill has served as a major stimulus to the AMA in its program for improved public relations and the development of the voluntary health insurance plans.

It should also be noted by members of the medical profession in Hawaii that the last session of the Territorial legislature took up the question of broader medical service, and that one of the planks of the local Political Action Committee's platform endorses a "little Wagner-Murray-Dingell bill" for Hawaii.

Perhaps one of the most significant decisions of the board of trustees announced at the San Francisco convention was the decision to revitalize the Bureau of Medical Economics. This action was in line with the recommendation of the public relations consultant, who also urged that a department of medical economics be included in *The Journal* and in *Hygeia*. The chairman of the board reported that negotiations were in progress for the employment of a capable and experienced economist to direct the Bureau of Medical Economics.

It is apparent from even a cursory reading of the proceedings of the San Francisco convention that the AMA is giving "all-out" support to prepaid medical plans, and is urging the development of statewide plans. The council on medical service and public relations reported that "at this time 31 states have plans set up and 12 states and the District of Columbia are in process of developing plans."

Fortunately, Hawaii is in the group that *has* a plan; we have had one for ten years, and it is working. From the standpoint of the profession in Hawaii, we must consider that the Hawaii Medical Service Association is our "positive . . . health program" and that it is our "greatest potential asset" in the battle over socialized medicine. This is a political fact that the medical scientist may be prone to overlook, but it is a fact that every physician in Hawaii should understand, and on which he should base his actions.

The HMSA may not be perfect, but it is ours; and it, in improved and extended form, is our *best* answer, and perhaps our *only* answer, to the proponents of government-controlled medical service plans.

KLEBER R. MILLER.

CAMPAIGN TO COMBAT HEART DISEASE

The initiation of a nationwide program of public education and information on diseases of the heart was announced in October by officials of the American Heart Association, Inc.

The program, according to Dr. Howard F. West, of Los Angeles, president of the association, will have as its prime purpose "the dissemination of educational information to the public in a broad effort to retard the rapid increase of heart disease throughout the nation."

"Fatalities ascribed to disease of the heart" Dr. West said, "are greater than the total of the next five leading causes of death. It is essential, therefor, that the public know more about the significance of blood pressure, infections, over-weight, rheumatic fever, and other factors which contribute to various types of heart disease."

It is estimated that there are more than 4,000,000 people in the United States today who have heart disease. Diseases of the heart and blood vessels, including cerebral hemorrhage, accounted for 575,000 deaths in 1944. Fatalities from the five other leading causes in 1944 were as follows:

Cancer	171,000
Accidental Deaths	95,000
Nephritis	92,000
Pneumonia	64,000
Tuberculosis	55,000

In addition to accounting for more fatalities than these five causes combined, heart diseases are responsible for an annual loss of more than 100,000,000 work days.

Officials of the American Heart Association state that the association's program will call for emphasis on educational work with schools, parent-teachers' associations and other groups concerned with children because of the importance of rheumatic fever and heart disease. According to recent surveys, this scourge of children causes more than five times as many deaths as the combined total of deaths from infantile paralysis, scarlet fever, diphtheria, measles, meningitis, and whooping cough. It is a serious disease among adults, too, as illustrated by the estimated 40,000 veterans who acquired the disease during their recent military service.

The educational campaign of the American Heart Association will reach its climax during National Heart Week to begin on February 9, 1947, which includes St. Valentine's Day. It is expected that all branches of medicine, pharmacy, insurance, industry and many other groups interested in health and public welfare will cooperate fully.

WHY CAN'T WE HAVE COLORED MARGARINE?

Oleomargarine, as margarine is still called by many people, *is nutritionally equal to butter, if not actually superior to it.* This is the considered judgment of the Food and Nutrition Board of the National Research Council, the Committee on Public Health Relations of the New York Academy of Medicine, and the American Medical Association. Some brands of margarine, at least, taste just as good as butter. They are all cheaper than butter to manufacture, and—important just now—they can be made available, which it seems butter cannot, in adequate quantities.

The vitamin A content of margarine is usually 15,000 units per pound or more, and it is stated on the package; the vitamin A content of butter varies rather widely, being lowest in the winter (when it is needed the most!) and it is *not* stated on the package. The unsaturated fatty acid content of butter appears to be significantly lower than that of margarine, though this problem has not yet been completely worked out. The caloric values of butter and of margarine are essentially the same. There is no significant difference in the digestibility of the two substances.

Yet the distribution of margarine to consumers is fenced about with heavy Federal and State taxes, penalties, and restrictions. It is taxed at its source, one-quarter of a cent a pound if white, *ten* cents a pound if colored! A wholesaler handling margarine must pay $200 a year for handling the uncolored product, $480 for the colored. A retailer must pay $6 a year to handle the white product, $48 to handle the colored one. Additional taxes are imposed by many states for the same purpose. Twenty-three states prohibit the sale of colored margarine entirely. Wisconsin and South Dakota actually tax a private home $1 annually for using margarine purchased outside the state!

The Territory of Hawaii has no restrictive legislation of its own with regard to margarine. We are prevented from getting it here by Federal restrictions only, and of course Federal restrictions are a matter in which we have little or no voice, as yet.

The whole problem seems to be one in which Congressmen from the states not controlled by dairy interests might well take constructive interest. Why tax the whole nation merely to support the manufacture of butter?

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 253rd regular monthly meeting of the Hawaii County Medical Society was called to order by Dr. Walter Seymour at 7 p.m., August 23, 1946 at the Volcano House for dinner, with Dr. Joseph E. Strode of Honolulu as our honored guest. Twenty-four members and four guests were present. After dinner, the meeting adjourned to the Hawaii National Park Auditorium for the scientific part of the evening. The first half was devoted to the showing of colored movies of the 1942 Mauna Loa eruption when the lava flowed to within a few miles of Hilo. The picture was shown through the courtesy of the Naturalist Department, National Park Service, of the Hawaii National Park. The chair thanked the National Park Service for the movies and the use of the auditorium.

An invitation from the doctors of North Hawaii area to hold the semi-annual meeting at Honokaa on October 12, 1946 was accepted with pleasure.

Dr. Joseph E. Strode, who had been invited to address the Society, was introduced by Dr. C. L. Phillips, a member of the Program Committee. Dr. Strode spoke on "Surgical Lesions of the Stomach and the Duodenum." He illustrated his talk with lantern slides collected from his surgical service. It was one of the most educational and well-attended lectures in recent months. After much discussion, the meeting adjourned at 9:50 p.m.

* * *

The 254th regular monthly meeting was called to order by Dr. Walter Seymour at 6:45 p.m., September 12, 1946 at the Hilo Country Club. A dinner was held in honor of Dr. Fred Irwin, a former member who is at present medical director of the Hawaii Medical Service Association in Honolulu. Thirty members and eight guests were present among whom was Dr. V. E. M. Osorio who practiced in Hilo for several years after World War I, and now practices in Piedmont, California.

The reading of the minutes was dispensed with.

The following communications were read:

1. A letter from Mr. John H. Hunt, a representative of Parke-Davis and Company at Honolulu, regarding a motion picture on "Scalp Avulsion."
2. The list of newly licensed physicians in the Territory, among whom was Dr. Hosea Dermain Ireland of the Puumaile Hospital of this city.
3. A letter of resignation as secretary by Dr. T. Yoshina who is contemplating a trip to the mainland.

The showing of the motion picture on "Scalp Avulsion," along with other movie films on physical diagnosis, was approved.

The resignation of Dr. Yoshina as secretary was held in abeyance and Dr. Walter Loo was appointed by the Chair to serve as acting secretary during the former's absence.

Since the response to Dr. Strode's talk last month was so favorable, Dr. Phillips, a member of the program committee, asked if the members were in favor of inviting other specialists from Honolulu from time to time under an arrangement whereby the Society foots the plane fare and hotel accommodations of the guest speakers while here. Dr. Leslie moved, seconded by Dr. Carter, and passed unanimously that the program committee arrange such programs as they saw fit. The chair, however, urged members to present papers or make case reports to stimulate scientific interest locally.

The applications to membership of Drs. Barton M. Eveleth, Edward F. Slaten, and Rodney T. West, all transfers from the Honolulu County Medical Society, were approved by the Board of Censors and they were elected unanimously into the Society. The secretary was instructed to inform the men of this action.

The applications to membership by Drs. Hosea Ireland, Philip Chock, Wah Tim Chock were read and turned over to the Board of Censors for study.

Dr. Leslie and Dr. Bernstein announced that Dr. H. E. Hilleboe, Director of Division of Tuberculosis Control, U. S. Public Health Service, was coming to this Island in the near future. They were requested to arrange a meeting and notify the members.

Dr. C. L. Carter, one of the co-hosts for the semi-annual meeting in Honokaa on Columbus Day, October 12, invited the members and announced the following program: Golf Tournament at 2 p.m. at the Hamakua Country Club; cocktails at his home at 6 p.m.; dinner at 7 p.m. at the Honokaa Club; scientific program by Drs. Crawford and Tomoguchi.

The following guests were introduced: Dr. V. E. M. Osorio, Dr. Philip Chock, Dr. Johnson of the Navy, Dr. Wah Tim Chock.

Dr. Fred Irwin was asked to say a few words. He thanked the Society and expressed his appreciation that the medical library at the Hilo Memorial Hospital had been named after him.

Mr. Neal Ifversen, General Manager of the Hawaii Medical Service Association, next spoke and informed us that as of October 1, 1946 the HMSA will take over the medical care of veterans under a new schedule of fees approved by the Veterans' Administration. He also stated that the experimental medical care plan of the Hawaiian Pineapple Company employees was now in operation on the Island of Lanai. Under this plan there is free choice of physicians and there are no medical perquisites. Both the patients and the doctors are satisfied. He surmised that this plan may some day include the sugar industry and it was the opinion of Dr. Irwin that the plantation physician's income will be increased. Much discussion followed.

Four reels of colored movies on physical diagnosis were shown including: two reels on endocrine disorders and two reels on abdomen, back, and perineum. These films were kindly loaned us by the Honolulu County Medical Society.

* * *

The Hawaii County Medical Society was the guest of its Hamakua and North Hilo members at the semi-annual gathering which was held at Honokaa, Hawaii. A golf tournament was held at the Hamakua Country Club in the afternoon, followed by cocktails at Dr. C. L. Carter's home and dinner at the Honokaa club.

The meeting was called to order by the President, Dr. W. Seymour, at 8 p.m., October 12, 1946, at the Honokaa club. Twenty-four members and two guests were present. The reading of the minutes of the previous meeting was dispensed with.

Mr. John H. Hunt of Parke, Davis & Company showed a movie on Scalp Avulsion.

The following correspondence was read: a letter from Dr. Leo Bernstein, Health Officer of the Island of Hawaii, concerning the vacancy in the position of Government Physicians of the South Hilo district. Interested doctors were requested to make application to Dr. C. L. Wilbar, Jr., President of the Territorial Board of Health before October 17, 1946; a letter from Dr. Tell Nelson of Honolulu who stated his willingness to speak on allergy at our meeting on January 2, 1947; a letter from Dr. Joseph Strode of Honolulu expressing his pleasure at having been at our August meeting; the names of the newly licensed physicians which were released by the Board of Health; a letter from Mr. J. L. Carrol, of the local HMSA, relative to the care of the employees of the Hilo Memorial Hospital; and that part of the minutes of the Board of Governors of the Honolulu County Medical Society which did not favor the HMSA Lanai medical plan.

After some discussion Dr. C. L. Phillips moved, seconded by Dr. S. Mizuire and carried, that the Society approve the HMSA Hilo Memorial Hospital Employees' medical plan.

The Chair announced that the HMSA plan on the Veterans' medical care was still not in effect at the present time.

Drs. Philip W. H. Chock, Wah Tim Chock, and H. D. Ireland were elected unanimously into the Society.

Dr. C. L. Phillips made the following announcements: that Dr. E. Hilleboe, Director of Division of TB Control, USPHS, was not coming and the luncheon meeting scheduled for Tuesday, Dec. 17th was cancelled; that Dr. Joseph Palma of Honolulu was coming on Nov. 29 to address the Society. The members voted to hold the dinner meeting at the Volcano House; and that Dr. Harold Johnson of Honolulu was coming under the auspices of the Plantation Physicians during the early part of November and he was available for consultation. After some discussion it was decided to hold the November meeting of the Society jointly with the Plantation Physicians' meeting when Dr. Johnson will give a lecture on dermatology.

It was also decided to hold our regular monthly meeting in December as usual. Dr. Crawford was asked to put on a scientific program at that meeting.

Dr. H. E. Crawford, Library Committee, reported that our medical library was contemplating joining the National Library Service in the near future.

The chair thanked Drs. C. L. Carter, H. Okada and L. Fernandez, our hosts, for the wonderful program.

Teruo Yoshina, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

A regular meeting of the Honolulu County Medical Society was held September 6, 1946 in the Mabel Smyth Building with 75 present. Dr. Gotshalk presided.

Continuing the A.M.A. series, "Physical Diagnosis," two reels entitled "Head" and "Abnormalities in Color" were shown.

The following new members were welcomed into the Society: Dr. Peter T. J. Yap, Dr. Verne C. Waite, Dr. F. Bernard Schultz (by transfer from Fairfax County, Virginia), Dr. Harrison S. Paynter (by transfer from San Diego), Dr. Yen Pui Chang (by transfer from Kauai), and Capt. Carl K. Heins (service member).

The Public Relations Committee has recommended the appointment of Mr. Kleber Miller to handle public relations for the Society. Mr. Miller has been invited to attend our meetings for two months and submit to the Board of Governors his proposal as to what he might accomplish for the Society.

The Blood Bank is seriously in need of blood replacements. Doctors are urged to cooperate in every possible way to induce their patients or families and friends of patients to replenish the blood supplies.

Dr. Arnold, Jr. presented the problem of financial assistance for the Physicians' Exchange and Nursing Service Bureau. The questionnaire recently circulated to members of the Honolulu County Medical Society indicated that a few more doctors were willing to subscribe to save the organization and that the subscribers would be willing to forego the service between 11 p.m. and 7 a.m. to save expense. There seemed to be three possibilities: (1) Create two classes of membership in the Physicians' Exchange—one at $5.00 a month for full service—the other at $1.00 or $1.50 a month for being called out of meetings and for nursing service. (2) Charge $7.50 a month, inducing as many doctors as possible to subscribe by improving service and meeting objections to service. If there were a shortage below $500 a month contributed by doctors, the Honolulu County Medical Society would make up the difference out of the Society's funds. (3) Discontinue the Nursing Service Bureau and Physicians' Exchange at the end of this month. Much discussion followed, including motions made, amended and withdrawn. Dr. Fennel pointed out that the Society's present funds are enlarged by considerable amounts earned for the Society by all the doctors who care for indigent patients in the hospitals. Dr. Pinkerton stated that all the doctors in Honolulu now profit by the Bureau at the expense of the 42 doctors who pay for the service. The continuation of these funds is indefinite. It was finally voted that every effort should be made to increase the number of doctors who subscribe to the service at $7.50 a month and that the difference—between the total monthly sum from the doctors, and $500—be paid monthly to the Nursing Service Bureau from funds of the Honolulu County Medical Society now being received for care of indigent hospital patients.

A program arranged by Dr. Robert Perlstein was presented by the staff of Leahi Hospital as follows:

DR. PAUL GEBAUER: *Pulmonary Resection in Tuberculosis.*

DR. HASTINGS H. WALKER: *Results of Thoracoplasty at Leahi.*

DR. DAVID B. RADNER: *Bronchoscopic Diagnosis in Non-Tuberculous Chest Conditions.*

Refreshments were served at the close of the program.

* * *

The Honolulu County Medical Society met in the Mabel Smyth Building on Friday, October 4, 1946. Dr. Bowles presided. There were 101 members and guests present.

Two more of the Physical Diagnosis films were shown—*Chest* and *Displacement of the Apical Impulse.*

Dr. Marcus Guensberg of the Territorial Hospital was welcomed as a new member of the Society.

It was announced that the Board of Governors has gone on record in favor of the H.M.S.A.'s insuring, at $1 a month on the "B" fee schedule, students in all public and private schools and the university.

The H.M.S.A. has been experimenting with a new medical care plan among the pineapple workers on Lanai. This plan will now be extended to other pineapple plantations in the Islands. A committee from this Society, headed by Dr. Liljestrand, has made a careful study of the plan and reported several objectionable features, which we have requested H.M.S.A. to correct as soon as possible.

The new fee schedule for veterans' medical care became effective September 1. The H.M.S.A. has mailed copies of the fee schedule to all members of the Hawaii Territorial Medical Association.

At the last Board of Governors meeting it was voted to appropriate $4,000 to the Medical Library

to be spent at this time for new books and journals and necessary equipment. This sum is being taken from funds received by the Society for the care of indigent hospital patients.

The evening program was a symposium on eclampsia arranged by Dr. Satoru Nishijima. The following papers were presented:

Dr. Yorio Wakatake: *Classification of the Toxemias of Pregnancy.*

Dr. I. L. Tilden: *Pathology of Preeclampsia and Eclampsia.*

Dr. Clarence Chang: *Symptomatology of Preeclampsia and Eclampsia.*

Dr. Richard Sakimoto: *Treatment of Preeclampsia.*

Dr. Guy Milnor: *Treatment of Eclampsia.*

Dr. Lyle Phillips, Dr. Robert Hunter and Dr. C. C. McCorriston discussed the papers.

A social hour with refreshments concluded the evening.

* * *

On November 1, 1946 the Honolulu County Medical Society was host to the Hawaii Territorial Dental Association and the Territorial Association of Plantation Physicians. This was a combination of the monthly meeting of the Medical Society with part of the seventh annual meeting of the Dental Association and the third annual meeting of the Plantation Physicians. It was held in the Mabel Smyth Building, with Dr. Bowles presiding. There were 162 present.

Talking pictures on "The Romance of the Sugar Plantations" were exhibited by Dr. Larsen and Dr. Liljestrand.

Dr. Bowles extended a welcome to the new members of the Society: Dr. Thomas W. Cowan (by transfer from Maui), Dr. John C. Milnor, and Dr. Kam Sung Tom.

It was reported that Dr. H. L. Arnold, Sr. had been appointed to represent the Society to work with the wholesale druggists in determining what should be considered essential drug supplies needed in the present strike emergency. The Governor has been asked for aid in having these essentials brought from the mainland.

The chairman stated that a letter from a Honolulu pharmacy had been received that day by the local doctors. Accompanying the letter were two small bottles containing what the letter described as "a mild yet effective emmenagogue." A motion was unanimously passed disapproving of this procedure and directing the corresponding secretary to so inform the writer of the letter.

Mr. James P. Blaisdell of the Employers' Council addressed the meeting on current labor management problems and trends in Hawaii.

Dr. Liljestrand introduced a round table discussion of new findings in relation to dental health. The results of a joint research study made by dentists and doctors on a large group of plantation children were presented through informal discussion illustrated by slides. Dr. Eugene Auchter read a paper on the importance of trace elements in human health. Dr. Floyd Hartman presented some findings on the bacteriology of the mouth.

Following the scientific program, those present adjourned to the lanai for a social hour. In the lounge was an exhibit of the Army plastic artificial eye program.

S. L. Yee, M.D.
Recording Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was held at Wilcox Memorial Hospital on Wednesday, July 10, 1946 at 7:15 p.m. with Dr. Depp in the chair.

Members present were Drs. Wallis, Liu, Boyden, Depp, Cockett, Brennecke, and Masunaga. One guest, Dr. Young, was also present.

Dr. Liu brought up the question of delivering blood samples to the Board of Health Laboratory at Mahelona Hospital. Dr. Wallis moved that the Secretary write a letter to the Acting Health Officer asking how the samples of blood should be sent to Mahelona. Seconded by Dr. Boyden.

Motion was made by Dr. Boyden and seconded by Dr. Liu to purchase a book of tickets from the American Legion sponsoring a Benefit Dance for the Old Age Home. Twenty such tickets for $1.00 apiece were purchased through Dr. Boyden. There was a question as to the type of patients admitted to the prospective Old Age Home. The Secretary was instructed to write a letter to the American Legion to clarify this point.

Dr. Brennecke discussed the possibility of new members requesting admittance to the Kauai Service Medical Association with reduced first call fee. Reduction in first call fee will decrease physicians' income and is not fair to the other groups of members. Dr. Boyden moved, and it was decided, that the Society instruct our Committee on Kauai Service Medical Association that this Society is against any change in policy as to admitting any member

or groups of members into the Kauai Service Medical Association.

* * *

The regular monthly meeting of the Kauai County Medical Society was held at Wilcox Memorial Hospital on Wednesday, September 11, 1946 at 7:00 p.m. with Dr. Wade in the chair.

Members present were Drs. Chisholm, Fujii, Kuhns, Liu, Wade, Wallis, Depp, Toney, Cockett and Masunaga. Guests present were Drs. Sax and Young.

Drs. Fujii and Toney were unanimously accepted into the Kauai County Medical Society, Dr. Fujii by transfer from Honolulu County Medical Society.

Two communications were read: one from Dr. Chisholm pertaining to delivery of blood samples and the other from the American Legion regarding types of patients to be admitted to the Old Age Home. It was decided that the President of the American Legion should be informed that the Old Age Home should not exclude cases that might require some nursing care.

Dr. Sax from the Veterans' Administration discussed with the members, the relationship of the Hawaii Medical Service Association and the Veterans' Administration.

Some of the important points brought out are:

(1) HMSA plan not yet officially ratified by the Veterans' Administration.
(2) Army or Navy Hospital must be used for the care of veterans when such institution is available.
(3) General plan for care of veterans is regulated by law and should not be confused with the HMSA plan.
(4) The procedures followed to take care of veterans are the same, but the physicians will be paid more rapidly through the HMSA, and the HMSA gets 10 per cent of the fee for the service. This 10 per cent comes from the Veterans' Administration.
(5) This relationship of the HMSA and the Veterans' Administration will set up a machinery by which a more uniform fee schedule will be established and every practicing physician of the Territorial Medical Association will be eligible to take care of veterans.

Movies on physical diagnosis were shown and the meeting was adjourned.

EICHI MASUNAGA, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

The members of the Maui County Medical Society were guests of Commander Hedbloom at the Naval Air Station in Kahului for their June meeting.

Dr. Hedbloom presented an interesting case history of pathology in a tarsal bone. Dr. Tell Nelson gave a very thorough and enlightening talk on allergy for the general practitioner. Considerable discussion followed.

Dr. Kushi of the Legislative and Public Health Committee reported that Mr. Spenser, Chairman of the Board of Supervisors, had been dissuaded from his socialized medicine proposal in favor of a plan similar to the Hawaii Medical Service Association in Honolulu.

A letter of commendation was sent to Dr. F. J. Halford for his outstanding services to the Territorial Medical Association as delegate to the A.M.A. and for his enlightening report on the San Francisco meeting.

* * *

On July 9, 1946 the Maui County Medical Society met at the home of Dr. Tompkins in Kula. Dr. Sanders presided. Members present were Drs. Osmers, Kushi, Patterson and Tofukuji. Guests included Drs. Underwood, Nelson, Ianne, H. Kushi, Merrill and Hedbloom.

There was considerable discussion of socialized medicine and of the role of this Society in politics. It was generally agreed that the Society would enter politics only to the extent of obtaining the views of the different candidates on medical problems.

Dr. Patterson gave a resume of the latest information on the Rh factor. There was an x-ray presentation of diagnostic problems of the chest by Dr. Ianne.

The Society was in favor of future meetings being held in various hospitals with presentation of clinical case histories.

* * *

The Maui County Medical Society met at the Wailuku Hotel on August 23. Drs. Patterson, Kanda, Von Asch, McArthur, Anderson, Osmers, Fleming and Sanders were the members present. Guests at the meeting were Drs. Merlin, Underwood, Hedbloom, Ianne, Nelson, H. Kushi and Harl.

There was some discussion of premarital examinations and the licensing of hospital personnel.

The Health and Legislative Committee had drawn up a statement regarding the Society's atti-

tude toward socialized medicine, which was presented at this time. After some revision it was sent to the Maui News for publication. (Published August 28.)

The Maui County Medical Society put itself on record as approving of Hawaii Medical Service Association.

Dr. Harl gave a well rounded talk on his experiences this year in the Charity and Tours Infirmary Hospitals in New Orleans, including new and revised treatments, the use of cotton in surgery, and many other subjects.

JOHN SANDERS, M.D.
President

* * *

Maui County Medical Society held its regular meeting September 14 at the Wailuku Hotel with Dr. Sanders presiding. Twelve members and five guests were present.

Dr. Charles Ianne and Dr. Edward B. Underwood were admitted to the Society by transfer and Dr. Raymond C. Dusendschon on direct application.

A uniform fee schedule for the doctors of Maui was discussed and it was pointed out that fees charged by Maui doctors were far below those of Honolulu and Mainland physicians. Members felt the Hawaii Medical Service Association fee schedule was a fair one and should be studied by the doctors before being brought up at a future meeting.

Following a short business session, the meeting was turned over to Mr. Neil Ifversen who explained the experimental plan now in operation by the Hawaii Medical Service Association for the plantation employees of Dole Hawaiian Pineapple Company and their families. Dr. Fred Irwin, Medical Director of Hawaii Medical Service Association, explained the new fee schedule for veterans.

* * *

A regular meeting of the Maui County Medical Society was held on October 18 at 6:30 p.m. in the Maui Grand Hotel with Dr. Sanders presiding. Members present were Drs. Balfour, Rothrock, Dunn, Izumi, McArthur, Fleming, Osmers, Uhde, Patterson, Kanda, Shimokawa, Underwood, Hedbloom, and Dusendschon. Guests included Drs. Conger and Deberquist and Mr. John H. Hunt.

Streptomycin was discussed. Malulani Hospital, being centrally located, was considered the most logical hospital to handle this drug. A committee was appointed to handle this matter with Dr. Edward Kushi as chairman and Dr. St. Sure and Dr. Patterson as members. Dr. Kushi was asked to request Mrs. Miriam Schmidling, superintendent of the hospital, to obtain approval from the chairman of the Board of Supervisors for using Malulani Hospital as a distribution center for streptomycin.

Dr. McArthur asked that the chairman be appointed to take his place on the Legislative Committee for the remainder of the fiscal year, since Dr. McArthur plans to leave the Islands in the near future. He stressed the importance of the functions of the Legislative Committee at this time. One candidate for the Legislature, he mentioned, has already gone on record in favor of free medical care for all of the people.

The following doctors were voted into the Society: Dr. R. T. Eklund, and Dr. Edward B. Underwood by transfer; Dr. Raymond C. Dusendschon by direct application. Due to sudden change of plans Dr. Charles Ianne left the Territory, returning to California, and has requested that the transfer card from Santa Clara Medical Society be returned. As the Maui Society had not yet voted on his transfer card for membership, the Society complied with his request.

Following the business meeting, Dr. Conger gave a very interesting talk, accompanied by lantern slides, on the diseases and operative procedures of the prostate gland. Mr. John H. Hunt of Parke, Davis & Company showed pictures of plastic surgery on wounds of the scalp, with emphasis on the use of blood plasma and Thrombin Topical during operation.

W. D. BALFOUR, M.D.
Secretary

PSYCHIATRIC COMMENT

PSYCHIATRY FOR THE GENERAL PRACTITIONER

IT IS NOT intended to present herein the problems of psychiatric classifications or diagnosis, but rather some suggestions concerning treatment of nervous and mental disorders by general practitioners, indications for referral to the psychiatrist, and certain legal problems involved therein.

The psychiatrist is, of course, not the only person capable of giving psychotherapy, that is, treatment by direct psychological approach, or by indirect approach through those about the patient, or by changes in the environment. Every successful physician is a psychotherapist day in and day out. Only the autopsy surgeon can escape doing psychotherapy in one form or another.

It is now generally recognized that of all patients presenting themselves to a physician, about one-third have symptoms based chiefly or entirely on physical disease, another third symptoms chiefly or entirely on emotional illness, and the other third symptoms due to a mixture in varying proportions of these two causes. Hence, it is important to recognize and treat both simultaneously when necessary.

Many modes of psychiatric treatment are definitely available to the general practitioner and should be applied by him when indicated in conjunction with any *necessary* medical and surgical procedures. Many patients with nervous disorders do not require a psychiatrist, nor is it possible for him to handle all such because of the long time required to treat the average psychiatric case.

Levine[1], in his excellent book *Psychotherapy in Medical Practice,* has listed three classes of psychotherapeutic methods: (a) methods suitable for the general practitioner; (b) advanced methods for the general practitioner who has some added training and aptitude; and (c) methods for the specialist.

Methods for the General Practitioner

The psychotherapeutic effect on a nervous person of a thorough physical examination cannot be over-estimated. Careful formulation and explanation of the findings are of importance lest symptoms and fears be determined and fixed unnecessarily. Physical examination should not ordinarily be repeated so as to give rise to doubt in the patient's mind.

Physical treatment well carried out carries psychotherapeutic implications. It should be stressed to the nervous patient that physical and medical treatments are used as symptomatic aids only, and are not the basic treatment of his symptoms. Reassurance is highly important. Hydrotherapy is helpful for nervous and restless individuals. This may be done in the bathtub at home using water at 98 to 100° F. for one to two hours. Occupational therapy is invaluable as treatment. Monotonous or repetitious work, such as sanding, fringing, reading, or light music helps to quiet the excited; while diversified and changing occupation, such as carving, woodwork, or stencilling with colors help stimulate the depressed. Diversion and entertainment are considered by some as forms of occupational therapy. A balanced daily routine should be established, with work for which the patient has interest and aptitude, hobbies, and social, emotional and spiritual outlets. Authoritative firmness in dealing with the patient is necessary. Suggestion, of course, is frequently very helpful. Hospitalization may be required for rest and physical treatment. It must be remembered, however, that merely lying in bed in a private room and thinking about one's troubles may result in an exacerbation of symptoms.

Removal of environmental strain—external or internal—is very important, whether it be at work or in the home. Frequently encountered stresses are in relation to the spouse, the in-laws, working and living conditions, financial difficulties, religious conflicts, sexual problems. At times one can change the attitudes of patients toward these situations; at other times, the situations themselves must be changed. Guidance and advice should be freely given.

Acceptable outlets for aggressiveness are desirable. Many persons feel hostile toward those about them and toward the world in general. These impulses may be released in such activities as carpentry, the hammering of metal, judo, and even golf.

Compensation for fears and inferiority feelings can be developed, as in the case of the skinny boy who turns out to be a Charles Atlas; or who redirects his energies into intellectual or other achievements. Satisfaction of frustrated basic

Read before the fifty-sixth annual meeting of the Hawaii Territorial Medical Association, Honolulu, May 4, 1946.

[1] Levine, Maurice: Psychotherapy in Medical Practice, New York, The Macmillan Company, 1944.

needs for love, affection, companionship, and security is important.

The physician should establish a constructive relationship with his patient and must not condemn past sins and errors.

Healthy identification with other individuals, or with groups such as the church, the Boy Scouts, etc., should be encouraged. By this means the individual tends to take on some of the qualities of the group and share in their reflected glory, thereby boosting his ego.

Bibliotherapy or the use of books in treatment is of the utmost consequence. It is important, however, that the selection be carefully made, and preferably that these books *not* deal with the nervous patient's illness, since he is not usually capable of handling the material objectively.

The above methods are all available to the general practitioner and are frequently all that may be required.

More Advanced Methods

Methods available to practitioner with added interests and aptitudes include (a) confession and ventilation or free discussion with the physician of the patient's problems; (b) the life history and development of the illness; (c) desensitization, or repeated discussion of the factors producing the anxieties and symptoms to a point where the patient no longer becomes perturbed about them; (d) persuasion and re-education, that is, reasoning with the patient about his illness and re-educating him in that respect.

Misconceptions

A number of misconceptions commonly entertained by the laity must be corrected at times by the practitioner.

Some nervous patients have been told that there is nothing wrong with them; obviously, something is wrong with them or they would not be complaining of their symptoms even though these may be determined by anxiety and fear, rather than by any organic changes. Many have been told that their symptoms are imaginary. This is a mistake, because they are perfectly real, just as the pounding of one's heart when badly frightened is real, even though it is on an emotional basis rather than because of anything organically wrong with the heart. They have been told that they must rise above these fears, and pull themselves together; that is precisely one trouble with these patients—they have been trying too hard in the wrong direction and as a result have produced more symptoms. Those persons who don't care and don't try usually don't develop such symptoms. Hopeless attitudes and prognoses have frequently been handed to such patients; this is totally unjustified inasmuch as a large percentage of the psychoneurotics can be helped if proper assistance is given them and the patient has cooperated well.

Over-emphasis has been laid on a number of points. Heredity is now known to be of relatively minor importance in many types of nervous and mental disease. It is true these diseases tend to occur more often in some families; however, this is probably more often due to faulty upbringing and environment than to direct heredity.

Masturbation, in spite of our medieval superstitions, has no evil effects physically or mentally so long as the individual does not feel guilty and is not concerned about its effects. Day-dreaming is not harmful so long as it does not cause withdrawal from socialization and interference with adjustment; in fact, many of our greatest contributions have come as a result of day-dreaming. Emotional disorders in pregnant women will ordinarily have no repercussions on their children. Homosexuality is not necessarily a sign of degeneracy, and occurs in many otherwise well-adjusted individuals. It should ordinarily be treated as illness and not as a horrible criminal offense. There is no sharp line between the normal and the abnormal.

All mental illness does not have one cause nor one treatment. Mental illness is not the outcome ordinarily of one single grief or shock, but is rather the cumulative result of toxic, organic or emotional stresses operating on a pre-existing type of personality makeup. Treatment then is directed toward the stresses and toward the individual. The idea that marriage and sex can cure everything, is of course, wrong. It is usually unwise to advocate marriage for emotionally maladjusted persons until they are somewhat improved, inasmuch as their difficulties may interfere with successful marriage. Sex relations certainly will not cure a person with anxiety, fear, and guilt, and they are contra-indicated for the homosexual until his treatment has progressed considerably. Encouragement, reassurance, re-education, etc., may be much better than punishment; there is a happy medium somewhere between coddling and severe strictness. All healthy persons have sex curiosity which should be respected, their questions answered properly and their drives directed into proper channels.

The Practitioner's Place

In general, the *practitioner's place in treatment* of specific types of mental illness is as follows:

In minor emotional problems in adults, the types of psychotherapy mentioned above for employment by the general practitioner should be utilized as indicated and feasible. In the mild psychoneuroses, the same obtains. In the deep neuroses, however, more intensive psychotherapy by a psychiatrist is usually necessary. In toxic-delirious and organic reactions, the treatment is essentially that of the cause whether it be drugs, alcohol, pneumonia, syphilis, hypertension, or what-not. In the manic-depressives, schizophrenics, and paranoids, psychotherapy by the practitioner may be helpful in mild cases; however, in advanced cases, a psychiatrist is usually necessary. The higher-grade feeble-minded may be helped by the practitioner; the idiot and imbecile usually require institutional care. The psychopathic personality is difficult to manage and may require hospitalization with intensive psychotherapy; even then the prognosis is guarded. Such of the above methods as are applicable should be utilized with these various types. The treatment of children is omitted here inasmuch as this had better be left to specialists in the field when such are available.

Indications for Referral

Indications for referral to a psychiatrist are emotional or mental conditions the practitioner has not the time to treat properly, severe depressions, paranoid conditions, homicidal cases, and most of the major psychoses. The depressions should be referred especially because of suicidal possibilities. Suicide may occur whether threatened or not in a number of conditions, e.g., with panics, in persecutory delusions, and in certain withdrawals. Hysterical suicidal attempts and threats are usually impulsive and not intended but may, nevertheless, be successful. Suicides may also occur accidentally during delirium with confusion; alcoholism with release of inhibition and conscience reactions; dementia praecox with delusions of sin; paranoid conditions in order to escape worse fates; other depressions, such as the manic, the reactive, the involutional, and the symptomatic.

Paranoid individuals who react to their delusions must be considered potentially homicidal as well as suicidal.

In such referrals, it is very valuable to the psychiatrist to have as much information as possible from, as well as the opinions of, the referring physician. It is also helpful if the patient and the family have been informed in a general way of what to expect from the psychiatrist. Some expect too much and some too little in the way of results. It is well to emphasize that psychiatric procedures require much time, much discussion, little medicine, and complete cooperation. It might also be pointed out that charges for such procedures, chiefly because of the time involved, are comparable to those for surgical operations, which indeed they are akin to.

Legal Problems

Last, but not least, mention should be made of *legal problems*[2] involved in handling psychotic patients. A physician is frequently confronted with a call concerning a psychotic patient and wants to know what to do about it. Under most circumstances, the physician may make a home call, administer sedation to the patient at the request of a responsible member of the family, and ask that The Queen's Hospital or City & County Emergency transfer the patient to the Mental Health Unit at Queen's Hospital for treatment by one of the psychiatrists on the hospital staff. If the patient objects and seems too clear mentally and there is some question about the situation, it is better to have the next of kin ask the police to remove the patient to the hospital. If the patient is obviously psychotic when the police arrive, they will not hesitate. However, if the patient should protest and particularly if the police observe nothing out of the way, it will be necessary for the family to sign a petition or complaint at the police station alleging that the patient is mentally ill and asking that he be removed to the hospital for observation. The magistrate or circuit judge will then issue a warrant to remove the patient to the county detention ward for observation. The law provides that the patient may be detained in the hospital for 48 hours. Then, if the patient protests, particularly if he requests his release in writing, or if he is a paranoid patient who may be a source of trouble, he should be released, or a commitment should be obtained within the 48-hour period.

The Queen's Hospital has the county detention ward on this island, and such is prescribed by law for the other islands. In regard to the outside islands, Dr. William Shanahan has recently informed me that on Kauai arrangements are presently being made for a county detention ward at the Wilcox Memorial Hospital. On Maui, there is a small unit at Malulani Hospital, which is a county hospital. This situation could be improved by a better plant and more nursing care. On

[2] Revised Laws of Hawaii 1945, Honolulu Star-Bulletin, 1945.

Hawaii, there are six rooms for psychiatric patients at the Hilo Memorial Hospital. Lanai and Molokai have no facilities for detention and treatment of psychiatric patients. Such patients are sent to Maui in which county Lanai and Molokai are located. So far as Dr. Shanahan knows, there have never been any psychiatric patients from Niihau, which has a very small population.

Such county detention wards can take patients for temporary detention and observation, but not under the law for treatment. Presently a law is pending to license The Queen's Hospital Mental Health Department as a private mental institution, at which time commitment there can be carried on in the same manner as to the Territorial Hospital.

In the case of commitments to the Territorial Hospital, one of several methods may be employed. With the approval of the medical director, certain patients may be taken on voluntary application, signed by the patients themselves (or their parents in the case of minors) if they are mentally ill or alcoholics and understand the nature of their petitions. In practice, the Territorial Hospital does not take alcoholics on voluntary commitments, nor any other patients unless they are likely to be cooperative and to remain. An alcoholic without psychosis may be committed to the Territorial Hospital on his own application, with the signature of a physician and the signature of a judge, without appearing in court, unless the judge insists. If a person other than the alcoholic signs, a court hearing is indicated especially if the patient is likely to object.

The law further provides for admission to the Territorial Hospital on the certificate of one physician. This requires a notarized application or petition by the next of kin, the signature of a doctor, and the permission of the medical director of the Territorial Hospital, but no signature by the judge. A person may be so admitted if he does not object and if the medical director will accept him. He may be kept for not longer than 30 days on such commitment after the patient or next of kin signs for his release.

An emergency commitment is provided for by law. This requires the signatures of two physicians on a regular commitment form, which does not need to be notarized. It must be supplemented, however, within ten days by a regular court order.

The regular court order provides for a notarized petition by the next of kin or next friend. If signed by other than the next of kin, twenty-four hours' notice must be served on the next of kin or person with whom the patient regularly resides, and a court hearing scheduled. This commitment consists further of a statement from a doctor who has examined the patient, and the signature of a judge. In case the petitioner desires no hearing, and the patient is not apt to object or is too ill, he need not appear in court.

Release from the Territorial Hospital is by law at the discretion of the medical director, who may parole, discharge, or deny release to any person. An appeal from such decision or from any commitment may be made to the psychiatric commission at the expense of the Territorial Hospital by any patient or friend. This commission has the power to uphold or reverse the decision of the medical director or the committing judge.

It is exceedingly important to keep careful notes of all proceedings in these cases in the event of litigation or question about any phase of the commitment. The constitutional and other legal rights of the individual must be respected. However, the above will well care for most of the problems which will arise.

Summary

There have been pointed out some methods of psychiatric treatment suitable for the general practitioner, indications for referral to the psychiatrist, the general prognosis, and certain legal problems involved therein.

It is hoped the above remarks will be of assistance to those of you who are engaged in the other fields of practice.

R. D. Kepner, M.D.

36-37 Young Hotel Building, Honolulu.

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RECENT ACQUISITIONS

By purchase:

Quarterly cumulative index medicus. v. 38. 1945.

Luck, J. M., ed. *Annual review of physiology. v. 6.* 1944.

Manson-Bahr, P. H., ed. *Manson's tropical diseases.* 12th ed. 1945.

From the AMERICAN MEDICAL ASSOCIATION:

A. M. A. *New and non-official remedies.* 1946.

A. M. A. *Reports of the Council on Pharmacy and Chemistry.* 1945.

From the HOSPITAL ASSOCIATION:

Bachmeyer, A. C. *The hospital in modern society.* c1943.

Comm. on Insurance Coverage, A.H.A. *Manual on insurance for hospitals.* c1940.

Mills, A. B. *Hospital public relations.* 1939.

N. Y. Comm. *Internships and residences in New York City.* 1934-37. c1938.

Ponton, T. R. *Medical staff in the hospital.* c1939.

Roswell, C. G. *Accounting, statistics and business office procedures for hospitals.* c1946.

Tead, Ordway. *Personnel administration.* 3rd ed. c1933.

U. S. War Dept. *Hospital diets.* c1945.

From DR. CHAUNCEY LEAKE:

Luck, J. M., ed. *Annual review of physiology,* v. 7. 1945.

Luck, J. M., ed. *Annual review of biochemistry,* v. 14. 1945.

Miller, Genevieve *William Beaumont's formative years. Two early notebooks 1811-1821.* c1946.

From the M. D. ANDERSON HOSPITAL, Texas:

Konjias, H. T., ed. *Manual of the M. D. Anderson Hospital for Cancer research.* 1945.

From DR. ROBERT H. HUNTER:

A. A. A. S. *Research conference on Cancer.* c1945.

From THE CLINIC:

Sulzberger, M. B. *Dermatologic allergy.* c1940.

From THE LIBRARY OF HAWAII:

Winternitz, M. C. *Collected studies on the pathology of war gas poisoning.* c1920. American Journal of Medical Jurisprudence. v. 1.

From THE ALSUP CLINIC:

Fluhmann, C. F. *Menstrual disorders.* c1939.

Rowe, A. H. *Elimination diets and the patient's allergies.* c1941.

From LEAHI HOSPITAL:

Funk, E. H. *Diagnosis and treatment of chronic diseases of the respiratory tract.* c1936.

From the DUKE ENDOWMENT:

Duke Endowment. *The small general hospital.* c1945.

From the TUBERCULOSIS ASSOCIATION:

Comm. on Tuberculosis in Industry, N.T.A. *Industry, tuberculosis, silicosis and compensation.* c1945.

Holand, Harold. *A mirror for cure-takers.* c1946.

From DR. H. L. ARNOLD, SR.:

Canano, Giambattista. *Musculorum humani.* 1925.

Jenner, Edward. *An inquiry into the causes and effects of the variolae vaccinae.* 1923.

Judd, G. P. *Anatomia.* c1838.

From DR. ERIC A. FENNEL:

Petersen, W. F. *Hippocratic wisdom.* c1946.

From MRS. H. A. POWERS, Maui:

Brumpt, E. *Precis de parasitologie.* Quatrieme ed. c1927.

* * *

The Library will be temporarily closed on Saturday afternoons, due to the lack of attendance shown by monthly statistics. In an effort to ascertain whether future users might warrant its reopening, a notice is being posted on the door requesting the signatures of any who may come to use the Library on that afternoon.

On the portrait page of *Wm. Beaumont's Formative Years* appears the following charming inscription: "To the Hawaii Medical Library, in respectful appreciation of the fine professional leadership of Doctor James Judd, and with best wishes to many new Beaumonts who may have formative years in Hawaii. Chauncey D. Leake, a happy visitor at Doctor Jimmy's 70th birthday party, May 4, 1946." Needless to say, Dr. Jimmy was very pleased.

* * *

The Tuberculosis Association of the Territory of Hawaii has allotted $750 to the Medical Library to be spent on books and journals in the field of tuberculosis. This will help greatly to increase the material available in the Territory for public education on this subject, since these books will be readily accessible in the Medical Library not only to doctors and nurses, but to laymen who are concerned with this problem.

As previously announced at the October meeting of the Honolulu County Medical Society, the sum of $4,000 has been allocated for library expenditures from funds received by the Society for the care of indigent hospital patients. This sum will not be set aside in the Endowment Fund for future use, but will be spent within the next few months on new books, journals, and additional items of equipment. It would be well for doctors who have commented upon the lack of material in their particular fields to drop in and make suggestions for purchases. Also, we would urge all doctors to keep in close touch with the new acquisitions, which will be arriving, we hope (barring maritime difficulties), very soon.

May we again assure you that the Library staff is most anxious and willing to assist you with your reference work.

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NOTES AND NEWS

PERSONALS

Dr. Thomas W. Cowan, formerly of Wailuku, Maui, is now associated with The Clinic, Honolulu, in the Department of Ophthalmology.

Dr. H. F. Moffat, formerly of The Clinic, is attending ophthalmological meetings and clinics on the mainland prior to opening his new office in Honolulu.

Dr. and Mrs. Edmund L. Lee, of Honolulu, are the parents of a son, Edson, their second child, born September 15 in the Kapiolani Hospital.

Dr. Victor G. Heiser, noted public health authority, visited recently in Honolulu on his way to Guam for the dedication of the new Navy Medical Center. While here he lectured at the Mabel Smyth Building and praised the Hawaii plantation medical care as "the best in the world for plantation workers."

Honolulu and Hawaii welcome back Dr. R. Nelson Hatt, who has returned after twenty-two years to resume his position as medical director and chief surgeon at the Shriner's Hospital. Since leaving Honolulu, he has achieved national recognition in the field of orthopedic surgery. He served in the Army in the European Theatre.

Dr. Shoyei Yamauchi, of Honolulu, has returned after post-graduate study in surgery in Baltimore.

Dr. Joseph Palma, of Honolulu, and Dr. Teruo Yoshina, of Hilo, are attending the meeting of the American Academy of Pediatrics in Pittsburgh. Dr. Palma will also attend a pediatric meeting in Ann Arbor, Michigan, and a meeting of the National Committee on Child Care in Washington, D. C.

Dr. Wah Kai Chang has resumed his practice at the Chang Clinic after an extended trip in the East.

Dr. Leslie A. Vasconcelles has recently become associated as a partner with Dr. Louis Gaspar in his office in Honolulu. Dr. Vasconcelles has been resident physician at St. Francis Hospital for the past year, following his discharge from the Army.

Recent new residents at St. Francis Hospital are Dr. James W. Allely, a graduate of the University of Nebraska in 1943. He served with the Occupation Forces in Japan prior to his discharge as a Captain; and Dr. William Goodhue, a native of Kaunakakai, Molokai, who was graduated from St. Louis University Medical School in 1942. He was a Lieutenant (junior grade) in the Navy.

The new wing at St. Francis Hospital is progressing satisfactorily and will be finished in several months. It will add considerably to the number of beds in the hospital, as well as offering a modern out-patient department.

Dr. Ralph Cloward has returned from attending the meeting of the Harvey Cushing Society in Boston.

Dr. Donald C. Marshall, of Honolulu, is vacationing on the mainland. He plans to attend various pediatric meetings and clinics, including the Academy of Pediatrics.

Dr. Fred Alsup, of Honolulu, is spending several months on the West Coast.

Dr. Philip M. Corboy, of Honolulu, has returned from a short trip to the mainland during which time he attended the meeting of the American Academy of Ophthalmology.

Dr. Edgar S. Childs has returned from post-graduate study in surgery at Cook County Hospital in Chicago.

Dr. F. Bernard Schultz, who served in the Army Medical Corps for five years during the war in Hawaii and was discharged as a Lieutenant Colonel this year, has opened his offices in the Young Building. He specializes in cardiology and cardiovascular diseases.

The Leahi Hospital has been fortunate in securing the full-time services of an outstanding thoracic surgeon, Dr. Paul Gebauer, formerly of Cleveland, Ohio. He served as thoracic surgeon to various Cleveland municipal hospitals between 1937 and his entrance into the Army as a Major; he served with the Cleveland General Hospital assigned to the South Pacific. Dr. Gebauer is an active member of the American Association for Thoracic Surgery, and a Fellow of the American College of Surgeons. His experience has included considerable cardiac surgery, as well as pulmonary. Under his direction a much broader program in chest surgery is being instituted throughout the tuberculosis sanatoria of the Territory.

Dr. Ernestine Kandel Hamre, of Honolulu, is spending several months on the mainland, dur-

ing which time she will visit hematology clinics in Boston and New York.

Dr. John T. Kometani, of Honolulu, is now at Tulane University School of Medicine, where he has a three-year fellowship in Pediatrics.

Two staff members from the mental hygiene bureau of the Board of Health have resigned. Dr. Martha W. MacDonald, child psychiatrist, plans to continue her work on the mainland, and Dr. Walter M. Mathews, psychologist at the child guidance clinic will be at the Merrill Palmer School in Detroit where he will head the psychology department.

Dr. Harry L. Arnold, Jr., is attending the first post-war annual meeting of the American Academy of Dermatology and Syphilology, in Cleveland, Ohio. He is giving a talk and showing a movie on leprosy, and presenting a photographic exhibit on the same subject, prepared by Dr. Irvin L. Tilden and himself. The movie and the exhibit will later be presented locally.

MEDICAL LEGISLATION

Legislation in Great Britain profoundly affecting the practice of medicine has passed the third and final reading in the House of Commons and may become law this year. The bill provides for free medical, hospital and sanatorium care to everyone, with no restrictions as to income or employment. This includes mental, maternity, convalescent and rehabilitation hospitals, and outpatient as well as in-patient services. It is the government's desire that all specialists practice in hospitals and that their services be free to everyone upon the request of the attending physician. They will also be permitted to have private patients. For general practitioners, remuneration will be on a civil service salary plus a per capita fee for each patient. Specialists will be on a straight salary since they will all be on a hospital staff. The cost of the services is to be covered by general tax funds, funds from the National Insurance Fund, and local taxes.

The British Medical Association and individual physicians are objecting strenuously to the bill, for many reasons. Among other things, it has been pointed out that this Labor Government Bill proposes to abolish for physicians the very principles labor unions have been fighting to establish and maintain for their members.

In contrast, France now has a medical insurance program financed by a 16 per cent tax on wages, with the employer paying 10 per cent and the employee 6 per cent. It operates as cash indemnity insurance. Benefits include general practitioner service, maternal care, and reimbursement for loss of wages during illness. Free choice of physicians and hospitals is allowed. A physician may be consulted at any time. Fees are paid by the insured. He in turn presents his receipt to the society and is reimbursed for 80 per cent of the total. Thus, to avoid abuses, the patient is required to pay 20 per cent of the cost of his medical care.

It behooves us all to follow closely trends in the U. S. A. in the coming year in medical legislation. The final form of any new legislation will be affected somewhat by the wishes of the medical profession, both individually and collectively. At present American medicine is being given a breathing spell, particularly from hearings on the Wagner-Murray-Dingell bill. However, the same forces will be striving in 1947 to change our American way of life to a more socialistic pattern. Senator Pepper's abortive attempt to include all persons under age 21 as "infants" in the Maternity and Child Welfare Act will no doubt be revived in 1947.

ARTHRITIS RESEARCH

A National Arthritis Research Foundation has been formed, with headquarters at 11 West 42nd Street, New York 18. Lionel Barrymore has appointed 50 prominent Americans to its Board of Sponsors and has added: "The National Arthritis Research Foundation will concentrate upon the study of arthritis and other rheumatic diseases related to it. Its purpose is to focus America's scientific genius upon this major challenge to national health. The Foundation aims beyond temporary relief by seeking out the causes, treatment and prevention of these diseases."

SCIENTIFIC EXHIBIT

Centennial Session, American Medical Association

At the Centennial Session of the American Medical Association to be held in Atlantic City, June 9 to 13, 1947, the Scientific Exhibit will include both the history of medicine during the past Century and the latest developments of medical science.

Application blanks for space are now available. All applicants must fill out the regular form. Applications close on January 13, 1947, after which time the Committee on Scientific Exhibit will make its decision and notify the applicants.

Application blanks for space should be procured as soon as possible. They are available from The Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

NATIONAL GASTROENTEROLOGICAL ASSOCIATION 1947 AWARD CONTEST

The National Gastroenterological Association announces its Annual Cash Prize Award Contest for 1947. One hundred dollars and a Certificate of Merit will be given for the best unpublished contribution on Gastroenterology or allied subjects. Certificates will also be awarded those physicians whose contributions are deemed worthy.

Contestants residing in the United States must be members of the American Medical Association. Those residing in foreign countries must be members of a similar organization in their own country. The winning contribution will be selected by a board of impartial judges and the award is to be made at the Annual Convention Banquet of the National Gastroenterological Association in June of 1947.

Certificates awarded to other physicians will be mailed to them. The decision of the judges will be final. The Association reserves the exclusive right of publishing the winning contribution, and those receiving certificates of merit, in its Official Publication, *The Review of Gastroenterology.* All entries for the 1947 prize should be limited to 5,000 words, be typewritten in English, prepared in manuscript form, submitted in five copies, accompanied by an entry letter, and must be received not later than April 1, 1947. Entries should be addressed to the National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.

* * *

BOOK REVIEW

Penicillin: Its Practical Application. Edited by Professor Sir Alexander Fleming. Price $7.00. Pp. 380. Philadelphia: The Blakiston Co., 1946.

This book tells pretty nearly all about penicillin, from the botanical classification of the mold that produces it, through the manufacturing processes, to the indications, modes of administration, dose schedules, and—albeit very briefly—untoward reactions. The tale is told by a series of 28 contributors, all English, and all competent men. It is up-to-date, for the references at the ends of many sections include references to 1946 publications. Such relatively new developments as the oil-and-beeswax suspension, and the aerosol inhalation, are discussed in detail. The book is decidedly a useful text and reference manual for the physician interested in knowing more about penicillin than the drug house circulars have to tell.—H. L. A. Jr.

CALLING ATTENTION TO
Items of possible interest to friends of Chauncey D. Leake

September, 1946

1. Books: Certain to be a Pulitzer prize biography is J. F. Fulton's *Harvey Cushing,* most carefully prepared and now ready (C. C. Thomas, Springfield, Ill., '46, 834 pp., $5.00). Soon to appear is 10 vol. *Encyclopedia of Chemical Technology* with much on chemotherapy and drugs (Interscience Encyclopedia, Brooklyn, '47). B. M. Patten offers well illustrated *Human Embryology* (Blakiston, Phila., '46, 776 pp., 1,366 illus., $7.00). H. Gold edits *Cornell Conferences on Therapy* (Macmillan, N. Y., Vol. 1, '46, 322 pp., $3.25). J. M. Nielson offers *Agnosia, Apraxia, Aphasia; Their Value in Cerebral Localization* (Hoeber, N. Y., '46, 300 pp., $5.00). H. Cramer analyzes *Mathematical Methods of Statistics* (Princeton Press, '46, 570 pp., $6.00). New edition finally ready of classic J. Peters and D. Van Slyke: *Quantitative Clinical Chemistry* (Wms. & Wilkins, Balt., Vol. 1, Interpretations, 1,000 pp., $7.00, '46; Vol. 2, Methods, soon!). For Ether Centennial, E. S. Ellis offers *Ancient Anodynes: Primitive Anesthesia,* which is quite British (Heinemann, London, '46, 187 pp., 21s). G. Bankoff dekruifs incompletely on *The Conquest of Pain: the Story of Anesthesia* (MacDonald, London, '46, 204 pp., 6s). F. F. Nord edits Vol. VI of *Advances in Enzymology* (Interscience, N. Y. 3, '46, 575 pp., $6.50). R. R. Gates offers *Human Genetics* (Macmillan, N. Y. 11, '46, 2 Vols., 1,518 pp., $15.00).

2. Hypertension: E. Braun-Menendez & Co.'s *Renal Hypertension* is well translated by L. Dexter (C. C. Thomas, Springfield, Ill., '46, 451 pp., $6.75). Symposium on *Experimental Hypertension* appears by H. Goldblatt, E. C. Coke, L. F. Leloir, I. H. Page, A. Grollman, G. E. Wakerlin, J. W. Remington, our E. Ogden, W. D. Collings, L. A. Sapirstein, R. J. Bing, W. Goldring & Co. (Sp. Publ., N. Y., Acad. Sci., Vol. 3, '46, 180 pp.). B. Halpert and A. Grollman find merely cardiac hypertrophy and renal lesions after 8 months chronic hypertension from renal ligatures in rats (*Proc. Soc. Exp. Biol. Med.* 62: 273, '46).

3. ACS: More information arrives in English summary on Bogomolets' antireticular cytotoxic serum: P. D. Marchuk discusses methods of preparation and tests for appropriate dosage (*Med. J. Acad. Sci. Ukranian SSR, Inst. Clin. Physiol.* 14: 273, '45). E. A. Tatarinov describes derman test reaction to trypan blue under influence of ACS (*Ibid* p. 81). He also offers notes on factors of body resistance to tumor growth (*Ibid* p. 50). L. N. Mashkilleison discusses ACS in chronic skin ulcers (*Am. Rev. Sov. Med.* 3: 443, '46).

4. Late in arriving, still noteworthy: A. S. Ohlsen's contribution to histochemistry of stomach (*Compt. rend. trav. Lab. Carlsberg, ser. chemie.* 23: 331-479, '41): Nobelate Swedish citizen A. Szent-Gyorgi's review of muscle function (*Acta Physiol. Scand.,* 9: Suppl. 25, '45); G. Lundin's review of mechanical properties of cardiac muscle (*Ibid,* 7: Suppl. 20, '44); T. Astrup survey of blood coagulation (*Ibid,* Suppl. 21, '44); J. Ambrosen's Geiger-Muller counter device for biological research (*Ibid* 10: 195, '45); G. Birath's study of lung volume and ventilation efficiency in relation to collapse therapy in Tb (*Acta Med. Scand.,* Suppl. 154, '44); O. J. Broch's report on regulation of serum electrolytes and salt and water metabolism (*Ibid,* Suppl. 166, '45) and K. A. Ekbom's description of "restless legs," characterized by paresthesia, pain and weakness

(*Ibid,* Suppl. 158, '45). E. Wang discusses thyroid influence on creatine metabolism (*Ibid,* Suppl. 169, '46).

5. Also notable: A. L. Lichtman and J. R. McDonald recommend polarizing microscope to note tissue birefringence variations in pathological states (*Arch. Path.* 42: 69, '46). V. Zvetkov & Co. discuss birefringence of liquids in ultrasonic fields, which might be applied to fresh tissue (*Acta Physicochim.* 21: 135, '46). P. A. Kometiani & Co. shows acetylcholine action in muscle is related to physicochemical state of cytoplasmic substrate to which potassium is bound (*Biochim.* 2: 262, '46). G. C. Brun shows arterial contraction after epinephrin is due to short peripheral axon reflexes (*Acta Pharmacol. Tox.* 1: 403, '45; 2: 22, '46). W. Wilbrandt ably discusses physiology of cell and capillary permeability (*Helv. Med. Acta* 13: 143, '46). F. W. Sunderman offers refreshing approach to study of edema and dehydration (*Am. J. Clin. Path.* 16: 353, '46). J. Pollard and S. B. Stoker show that trauma releases local alkaline blood coagulant which is neutralized systemically by heparin (*Quart. J. Exp. Physiol.* 33: 267, '46). L. C. D. Hermitte discusses venomous marine molluscs (*Trans. Roy. Soc. Trop. Med. Hyg.* 39: 485, '46). E. G. Vassaf and V. R. Hall recommend 10 units insulin before meals in treating acute alcoholism (*New Eng. J. Med.* 235: 190, Aug. 8, 1946). W. Frei reviews factors in infectious epizootics (*Acta Trop.* 3: 1, '46). I. Abelin shows that cholesterol content of adrenals increases in narcosis (*Helv. Physiol. Pharmacol. Acta* 4: 1, '46). Our G. R. Herrmann reports on effects of decholesterizing agents on cholesterol levels in various diseases (*Texas S. J. Med.* 42: 260, '46).

October, 1946

1. Antibiotics: H. J. Carlson and pals find buttercup extracts are antibiotic and sagebrush extracts are antimalarial (*J. Bact.* 52: 155, '46). S. R. Bose isolates polyporin, selectively active antibiotic from *Polystictus sanguineus,* a genetically stable wood-rot fungus found in India (*Nature* 158: 292, Aug. 31, '46). W. H. Wilkins continues search for antibiotic fungi and finds 10 very active species among wood-destroying Basidiomycetes (*Brit. J. Exp. Path.* 27: 140, '46). M. I. Smith & Co. finds streptomycin and promin synergize in inhibition of tubercle bacilli (*Proc. Soc. Exp. Biol. Med.* 62: 157, '46). E. Wolinsky and W. Steenken find streptomycin action reduced by increasing acidity and that streptomycin and penicillin resistance occur independently of each other (*Ibid* p. 162).

2. Geriatrics: P. C. Koller shows that nucleic acid reduction resulting from age, cold, disease or undernourishment hinders division of chromosome threads and may stop spermatogenesis (*Proc. Roy. Soc. B.* 133: 313, '46). O. H. Lowry & Co. finds no significant histochemical change in liver or brain with aging, but note decrease in relative mass of kidney cells (*J. Gerontol.* 1: 345, '46). G. Kelemen notes increased tonsillar activity at onset of senescence like that at onset of puberty (*Geriatrics* 1: 277, '46).

3. Worthy volumes: Clearly, wisely, briefly G. R. Stewart philosophizes in *Man: An Autobiography* (Random House, N. Y., '46, 310 pp., $2.75). P. S. Hudson and R. H. Richens too politely show the silly fallacies of Lysenko's non-mendelian and dialectic genetics (*New Genetics in the Soviet Union,* Imp. Bur. Genetics, Cambridge, '46, 88 pp., 6s). F. Weidenreich's *Apes, Giants and Man* implies question of size as criterion of biological excellence (Univ. Chicago Press, '46, 129 pp., $2.50). D. E. Green edits useful *Currents in Biochemical Research* (Interscience, N. Y., '46, 494 pp., $5.00). P. M. Symonds discusses *Dynamics of Human Adjustment* (Appleton, N. Y., '46, 680 pp., $5.00). H. N. Wieman offers reconciliation of naturalism and religion in *The Source of Human Good* (Univ. Chicago Press, '46, 319 pp., $3.50). E. T. Engle edits *The Problem of Fertility* (Princeton Press, '46, 320 pp., $3.75). E. Herz and T. J. Putnam offer *Motor Disorders in Nervous Diseases,* with 10 long films (Columbia Univ. Press, N. Y., '46, 192 pp., $3.00 book only). J. Hersey's medicinal and conscience-stirring account of A. bomb at Hiroshima would make a W. V. (*New Yorker,* Aug. 31, '46, whole issue, no cartoons). Less publicized than *General Education in a Free Society* (Harvard Press, Cambridge, '45) but equally as significant is the *Report of the Curriculum Committee of the Univ. of Wisconsin* (Madison, '46, 138 pp., full bibliography).

4. Pharmacology: K. K. Chen & Co. reports further on antispasmodic action of B-dimethyl-amino-ethyl benzilate HCl (*Gastroenterol* 7: 213, '46). R. R. Burtner summarizes synthetic antispasmodics (G. D. Searle, Chicago, '46, 27 pp.). E. Frommel & Co. reports that heavy metal salts tend to cause ascorbic acid depletion and blocking of cholinesterase (*Helv. Physiol. Pharmacol. Acta* 4: 301-318, '46). R. H. Moore & Co. study sulfonamide allergy in man showing necrosis of tissues involved with hyperactivity of reticuloendothelium (*Am. J. Path.* 22: 703, '46). E. J. Van Liere & Co. show how glucose inhibits gastric motility proportionally to amount present (*Gastroenterol* 7: 218, '46). G. Hemmeler concludes that neither iron nor liver are helpful in anemias due to infections (*Helv. Med. Acta* 13: 20-97, '46). D. Lester & Co. gives data on absorption, distribution and excretion of aspirin, showing 75% excreted in urine in 15 to 30 hours (*J. Pharmacol. Exp. Therap.* 87: 329, '46). Much data on di-isopropyl fluorophosphate (DFP), potent cholinesterase inhibitor, offered by W. Modell & Co., R. G. Horton & Co., G. B. Koelle and A. Gilman (*Ibid* 400, 414, 421, 435). Supplement of 125 pp. to this vol. devoted to British Anti-Lewisite (BAL), 2, 3, dimercaptopropanol, of value in heavy metal poisoning.

5. Oddments: G. Marsh and H. W. Beams demonstrate that growth direction of nerve fibers may be determined by electric current (*J. Cell. Comp. Physiol.* 27: 136, '46). J. Trueta & Co. gives data suggesting hypertension may result from disordered activity of nerve centers giving renal cortical ischemia and medullary congestion (*Lancet* 2: 237, Aug. 17, '46). S. Lindsay & Co. finds atheromatosis after diethylstibesterol (*Proc. Soc. Exp. Biol. Med.* 62: 315, '46). R. W. Wissler & Co. offers more data showing adequate supply of essential amino acids necessary for antibody production (*Ibid* p. 199). R. J. Rossiter tabulates 3 stages of recovery from severe protein deficiency, showing there is weight loss in 1st stage (*Nature* 158: 304, Aug. 31, '46). W. Schurer shows mast-cells and "heaped up" basophils are both heparin storage cells (*Helv. Med. Acta* 13: 161, '46). Our staff pot-boils locally, with W. A. Selle's note on physiological basis of asthma quite worthy (*Med. Rec. Ann.* 40: 1547-1570, '46).

IN MEMORIAM
NATHANIEL M. BENYAS, M.D.
September 7, 1946

KINJI UCHIDA, M.D.
September 14, 1946

Hawaii Medical Service Association

417 HAWAIIAN TRUST BLDG. PHONES 58873 - 3396

A NON-PROFIT ASSOCIATION PROVIDING MEDICAL AND HOSPITAL CARE

· THE DOCTORS' PLAN ·

News

- Arrangements have been completed for the inception of the MAUI MEDICAL SERVICE ASSOCIATION, thereby making the HMSA territory-wide.
- Reciprocal Benefits to members on any of the islands.
- We wish to thank the Maui County Medical Society for their cooperation in making this plan possible.

Serving and Conserving the Community Health

●

"Boost H.M.S.A. to Your Patients"

A Report

ON RECONSTITUTED MILK, THE ONLY SOLUTION TO THE ACUTE SHORTAGE IN HAWAII OF FRESH FLUID MILK

Reconstituted Milk

The accepted American medical standard is "o quart of milk a day for children—a pint for adults"—yet milk production in Hawaii last year averaged less than one-half pint per person.

Reconstituted Milk is a whole milk product, reconstituted from concentrated butter fat and skim milk solids by the addition of water, homogenized and then pasteurized.

It is a highly acceptable food for infants and convalescents, since it forms a softer curd in the stomach and digests more easily as a result of the homogenization process.

Tests conducted by the Board of Health have shown Dairymen's Reconstituted Milk to be higher in butter fat content and milk solids than either Grade A or Grade AA fresh milk requirements, and far below the maximum bacteria count for both:

	Minimum Requirement		*Maximum*
	Fats	*Solids*	*Bacteria Count*
Grade AA	3.3	8.5	15,000
Grade A	3.0	8.5	30,000
DAIRYMEN'S (9/4/46)	3.6	8.6	2,000
DAIRYMEN'S (9/6/46)	3.7	8.8	5,000

Since all ice cream and milk beverages produced commercially in Hawaii are manufactured from the same basic ingredients used in Reconstituted Milk, most people here are already consuming foods basically similar to Reconstituted Milk.

Dairymen's

ASSOCIATION, LIMITED
HONOLULU, HAWAII

INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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SYMPOSIUM ON TUBERCULOSIS

Programs in Tuberculosis Nursing at Leahi Hospital

CHARLOTTE KERR, R.N.*

An affiliation in tuberculosis nursing was initiated at Leahi Hospital in March, 1946 for students in the schools of nursing in Hawaii. This affiliation consists of a two months' course, during which time the nurses live at Leahi Hospital and devote all of their time to the study of tuberculosis. The purpose of such a course is to arouse on the part of the students a consciousness of the problems of tuberculosis in the community; to give them knowledge of the methods of prevention and cure of this common, destructive disease; and to give them an understanding of the rehabilitation program for patients who are getting ready to return to the community as well-adjusted and self-reliant citizens.

Formal classroom instruction consists of sixty-two hours of lectures and discussion on all phases of tuberculosis and its treatment. The teachers are the physicians and department heads of the hospital, members of the staff of the Bureau of Tuberculosis of the Board of Health, and the executives of the Hawaii Tuberculosis Association. Each student is given a rather comprehensive manual containing pertinent material including nursing procedures. She also visits all departments of the hospital and Lanakila Chest Clinic for observation of the work being carried on in each place.

For example, each student spends a day in the pathological laboratory learning about some of the diagnostic methods for tuberculosis; a half-day in the Social Service Department for a presentation of the system of handling family problems involved; a half-day in the Outpatient Department where she can learn first hand the emotional, economic and health problems of former patients. She observes in pneumothorax clinic and in the operating room where she watches each one of the several types of surgical treatment used at Leahi Hospital for tuberculosis patients. She is taken to autopsies for a demonstration of the pathology of tuberculosis. She spends a day at the Lanakila Chest Clinic of the Bureau of Tuberculosis and later makes a home visit with a public health nurse. She attends staff conferences in the hospital. She visits the Child and Family Service Agency to learn how the children of tuberculous parents are cared for. She goes on a jaunt to our Sheltered Work Shop to observe the "hardening-up" process of convalescent and outpatients.

The students spend an average of thirty hours a week on the medical and surgical wards, where they are given an opportunity to care for patients with both pulmonary and non-pulmonary tuberculosis. Ward experience is carefully supervised by head nurses and by the instructors. The physicians and head nurses make an invaluable contribution by having frequent bedside clinics about typical or especially interesting conditions, both physical and emotional. Each student writes one complete case study and several nursing care plans, and participates in a case study conference toward the end of the course. This conference consists of a presentation of the entire picture of one patient by the student nurses, the public health nurse, the social worker, the rehabilitation worker, the physician, and any other persons involved in the care and treatment of the patient.

The emphasis throughout our program is on the education of the student. At no time are students depended upon to carry the burden of service to patients. They are never assigned to evening or night duty except that each student is given the opportunity to do special duty until 10 P.M. with one or two patients post-operatively on the day of surgery.

We feel that this affiliation should be of great value to student nurses and to the community in

* Director of Nursing Education, Leahi Hospital

which they will later practice nursing and so be in a position to aid in the program for the control of tuberculosis. Because of the high incidence of tuberculosis in the Hawaiian Islands, we think that it is important to educate as many nurses as possible. Therefore, we are planning to offer a post-graduate program in tuberculosis nursing in the near future. This course will be similar to the one described above but more inclusive. A later announcement will be made regarding the details of this course.

Projects of the Tuberculosis Association

Kum Pui Lai*

Setting into motion an intensive post-war program, the Tuberculosis Association of the Territory of Hawaii is helping to reduce Hawaii's high tuberculosis rate, which averaged approximately 55 deaths per 100,000 population during the war years.

Official and voluntary health agencies are joining forces in a plan to make possible the x-raying of every person 15 years of age and over in the islands. With this goal in mind, the Association has purchased for the Territorial Board of Health a $30,000 mobile x-ray unit which is expected to arrive before January, 1947. Two other units, one owned by the Board of Health and a second purchased by Christmas Seal funds and the Hilo Shippers' Wharf Committee, are now at work.

Also high on the list of the Association's activities is a rehabilitation program to aid tuberculosis patients safely to resume their lives as useful citizens following treatment and recovery. In April, 1945, a rehabilitation department was established at Leahi Hospital through the joint efforts of the Association and the hospital. The department, which conducts an in-hospital and post-hospital program, served 284 patients in the first fifteen months of its organization. The rehabilitation executive, with the assistance of sanatorium physicians at Leahi Hospital, has been successful in coordinating all services, such as occupational therapy, education, social service, library, recreation, job placement and the Sheltered Workshop, under one direction. A long-term Territory-wide program is under way to serve persons with a history of tuberculosis.

Next year will see the construction of a Rehabilitation Center and Tuberculosis Association offices on property adjoining the Lanakila Health Center. The new Sheltered Workshop, which will accommodate at least 50 discharged patients, will offer training in book binding, watch repairing, sewing, light carpentry work, repairing of light weight electrical appliances and supplementary business college training. At the present Workshop, which has a capacity of 28 patients, training is going forward in the well-equipped woodwork department, and in the book binding and sewing divisions.

As in the past, health education will continue to be a principal function of the Association. To expand the educational program a graduate of the Yale University School of Public Health, who has received field training under the direction of the National Tuberculosis Association, was added to the staff this year.

As a part of its health education services, the Association supplies tuberculosis material to physicians, nurses, patients, teachers, students and to the general public. Development of its library, which is one of the best collections of health education books in the Territory, will continue. A sum of $2500 has been set aside to assist Leahi Hospital and the Honolulu County Medical Library in acquiring technical journals and books.

The visual education program will likewise be expanded with the purchase of additional films on tuberculosis, nutrition and general health. Requests for health movies in Honolulu have increased from 250 showings in 1945 to 500 showings in 1946. The library now consists of about forty 16 mm. sound films.

Nutrition, closely allied with the tuberculosis problem, has been adopted as one of the Association's educational programs. Three county nutritionists, whose salaries are paid with Christmas Seal funds, work with all groups in the community, especially those whose families or associates have a history of tuberculosis. The nutrition film, "Found in Hawaii," was completed in February of this year and was shown 125 times during the first six months in the Territory and on the mainland to an estimated total audience of 25,000 people. The Association plans to produce two other local films, one in various Filipino dialects, and a second on tuberculosis case-finding in Hawaii.

On a professional level, the training of student nurses in tuberculosis nursing was begun in March, 1946 at Leahi Hospital and is being expanded to include students from all hospitals. The project, first initiated by Miss Patience Clarke, is now under the direction of Miss Charlotte Kerr.

Christmas Seal funds are also helping to finance specified medical research in local hospitals and clinics.

* Executive Secretary, Tuberculosis Association of the Territory of Hawaii

Looking toward the future, the Association is preparing for the day when Hawaii well may be the center of an international tuberculosis program. Its strategic position in the Pacific area, its years of development, and its inter-racial staff make the Association a natural leader among nations which now are battling a grave tuberculosis problem. With this in mind the Association will hold in June of 1947 a Tuberculosis Institute at the University of Hawaii to be conducted by staff members of the National Tuberculosis Association.

Likewise, the development of air transportation is making it possible to work in closer coordination with health agencies on the mainland. This year the executive secretary spent several months on the mainland attending the California Tuberculosis Association meeting; the National Rehabilitation Association meeting in Chicago; the National Social Workers Conference in Buffalo; and the National Tuberculosis Association annual meeting in Buffalo. It is hoped that an exchange plan involving health secretaries may be initiated.

The tuberculosis program rests in a large measure upon the success of the annual Christmas Seal Sale, sole support of the Association. All attempts are being made to keep the fund raising campaign on a high plane so that post-war plans to aid in cutting Hawaii's tuberculosis death rate may be fully realized.

A Medical Social Worker Looks at Tuberculosis

Lucille McMahon, R.N.*

There were 281 deaths from tuberculosis in the Territory of Hawaii last year. This means that many families and homes, once happily united, were tragically broken up. The bulk of deaths from tuberculosis occur in the most productive period of life, when the investment of the individual is at its maximum; when the largest number of dependents who are likely to suffer from insufficient care are left to pass on their heritage of poverty, ills and evils to another generation. We are ever mindful of the fact that tuberculosis goes hand in hand with poverty. It is only the rich man who can afford complete mental and physical rest, healthful surroundings, and expensive and nutritious food.

Tuberculosis presents few dramatic manifestations. The general public shows very little interest in the disease. As far as is known leprosy is far less contagious than tuberculosis; yet one case of leprosy in a community will cause more excitement and comment than a hundred deaths from tuberculosis. The 281 tuberculosis deaths in the Territory last year created little or no comment. If these had been deaths from leprosy, there would have been many excited meetings and heated discussions by citizens and public officials. For a disease that is both preventable and curable, the present high mortality and morbidity rates for tuberculosis seem inexcusable.

Tuberculosis has sociological, psychological, economical, occupational and genetic aspects as well as its medical phases. No phase can afford to be neglected. Tuberculosis presents no simple problem. It is confined to no class, race or country. It is no respecter of age or sex. Its victims are to be found in the great cities, in small towns, in villages and in the scattered farm homes of lonely districts. Its social implications are too insistent to be disregarded and too often medical care is wasted because an unsolved social difficulty abruptly ends the period of treatment.

Although the tuberculosis case is primarily a medical problem, it also represents to the county welfare office a debit on the county; to the employer a broken-down worker; to the family the loss of economic and emotional security. There is always a substantial number of patients who leave the hospital against medical advice. This is largely due to unsolved social situations rather than to failure of the medical service.

The medical social worker generally does not have contact with a family until there is a hospitalized member. There is no exact technique like the tuberculin test to give evidence of social lesions; no social x-ray to depict the shadows of personal doubts and fears. The patient upon admission to the hospital is an individual with a broken body and a disturbed mind, and not just a pair of lungs sent in for repair.

The first thing always prescribed is absolute rest from all physical, mental and social activities. This is a complete change from the usual way of life in almost every sphere—family, home responsibilities, occupation, recreation and sex life. In no disease is more stress given the need for securing the patient's personal cooperation in his treatment. An eminent physician once said, "Those who deal with the tuberculosis problem know only too well that we could save and prolong many more lives among the tuberculous, even without further improvement of our specific remedies, if we could secure a heartier cooperation among our patients."

Although many tuberculous patients show a marvelous strength of character, social helpfulness

* Medical Social Worker, Honolulu, T. H.

and thoughtfulness for others, much commoner are the instances of marked egocentricity, rapid changes in mood from optimism to depression; the selfish, reckless jeopardization of their own and their family's welfare. An outstanding mental reaction which is present in varying degrees in all patients is the fear of the disease and its result—death. Fear is a potent factor in producing nervous exhaustion and lowering of the vitality. The effect of emotions upon the physical condition has long been recognized by physicians.

There are many personal restrictions in the treatment which must be followed throughout an uncertain life. Fortunately it is the practice of most physicians to advise their patients of the exact nature of the disease and to offer workable methods of dealing with the problems involved.

The social worker endeavors to ascertain the actual attitude of the patient and what lies beneath it. Probably his present outlook will bear a marked resemblance to his reactions to other critical experiences in life. The social history not only deals with chronological events but offers an evaluation of the patient's personal emotional experiences, his state of mind in connection with these events, and his interpretation of them. The patient often needs help in gaining insight into his attitudes. Many times a patient refuses to admit that he has tuberculosis because he is afraid to face a future in which his life plans may have to be re-arranged. The sudden curtailment of personal liberty, self-direction and self-expression constitutes an immediate re-organization of his life that is not necessary in the treatment of other diseases. It is not infrequent that a patient comes to the hospital with funds exhausted after a long period of declining health and a struggle to avoid hospitalization. This means utter dependence upon charity and the loss of power to direct his own and his family's affairs. He often feels after months of hospitalization that he is losing his position of respect and responsibility in his home and in the community.

Probably no greater challenge can be offered the medical social worker than that in the field of tuberculosis. A well-rounded background is essential to understand and solve the many varied problems brought about by emotional attitudes, plans for treatment and rehabilitation, and environmental relationships of the patient. The social worker in the tuberculosis hospital must have an earnest, unshakable confidence that tuberculosis can be successfully treated. To the patient must be transmitted the belief that he is in the right place and receiving the best possible treatment. The human equations involved can never be measured by financial yardsticks. But the return of well adjusted, successfully treated patients to the community more than compensates for the hard work, the disappointments and the failures that dot the way.

* * *

Staff Education Programs Bureau of Public Health Nursing Territory of Hawaii

JANICE MICKEY, R.N.*

The in-service staff education program for the Bureau of Public Health Nursing in the Territorial Board of Health for this past year has been focused upon the various aspects of tuberculosis control. The nurses throughout the Islands are meeting problems in this field every day and a need had been felt for a comprehensive review and evaluation to help in planning for more effective ways of meeting the need.

The public health nurses on Oahu had a series of preliminary discussions centering about the most effective techniques for stimulation of productive learning, from both the education and social work viewpoints.

The tuberculosis control material was presented in lectures and discussions and covered the following subjects:

1. Epidemiology of tuberculosis.
2. Control measures from a public health standpoint.
3. Therapy in the hospital: medical, surgical and drug treatments.
4. Survey procedures, including use of mobile units.
5. Rehabilitation program for the tuberculous patient.
6. Nursing care in the home.
 a. The interview explaining diagnosis and need for medical care.
 b. The teaching to the family of the nursing care and isolation procedures that are necessary for the comfort of the patient and the safety of contacts.
 c. The methods for interpreting need and procedure for carrying out examination of contacts.
 d. The place of the public health nurse in the hospital program, i.e., interpretation of home problems to hospital staff, helping with solution and referral of home problems to community agencies in order to mitigate the anxiety of patient in the hospital.
 e. The preparation of home for dismissal of patient from the hospital.

Following the series of classes on Oahu, this same material was presented in two-day institutes on Maui, June 24 to 25, and on Hawaii, July 30 and 31. The problem on Kauai was not felt to be serious enough to necessitate an institute at this particular time.

* Assistant Director, Bureau of Public Health Nursing

Mrs. Helen Gage, Secretary
City & County Nurses' Association
Honolulu, T. H.

Dear Mrs. Gage:

We have been attempting to awaken the interest of the hospitals in the Territory in the establishment of a large scale tuberculosis control program with the hospitals themselves. Not only should this be directed to the establishment of routine tuberculin testing and x-raying of employees, but also of x-raying the chest of every patient admitted.

No organized group would have a greater interest—nor a more vital one—in such a program than the nurses who are subjected to this hazard of caring for patients with unrecognized and undiagnosed tuberculosis. There are already at least 56 hospitals in the United States which have such a program, and it is found that anywhere from 0.5% to 2% of persons admitted for other reasons have active pulmonary tuberculosis. Since the prevalence of tuberculosis in the Territory is known to be higher than in most areas on the mainland, and since only 5 states have as high a death rate as the Territory, it is reasonable to assume that the percentage of unsuspected tuberculosis admitted to our hospitals is also high.

You are also aware that the incidence of tuberculosis infection and disease is high in nurses, especially in nurses in training. It is true that training schools in the Territory do have an adequate program of tuberculin testing and x-raying their students and other employees, but such a program does not prevent acquiring the infection from the many undiagnosed cases who are admitted. The discovery of an infectious disease such as tuberculosis is essential for the protection of those who take care of such a patient.

The only sure protective device is the x-ray. We know that we cannot rely on the absence of symptoms or physical signs to rule out tuberculosis. There still exists in the minds of the majority of people the belief that tuberculosis cannot be present without some recognizable symptom. Even far advanced active disease may present no signs on stethoscopic examination. If every hospital patient were to be examined by x-ray on admission, not only would the hospital and its personnel be protected from this disease and the attending physician perhaps be spared the criticism of missing a case of tuberculosis, but also the entire community would benefit.

The favor and support of your Association is earnestly desired for the promotion of such a program in our hospitals. The furtherance of such a program would be of inestimable value not only to you and your colleagues as individuals, but also to the community in the final eradication of tuberculosis from the Territory.

Any help which you might be able to give would be sincerely appreciated.

ROBERT H. MARKS. M.D.
Director. Bureau of Tuberculosis

The institutes were open to any interested person and they were attended by plantation nurses—both hospital and visiting nurses—social workers, nutritionists, rehabilitation personnel, tuberculosis sanatorium nurses and physicians, public health nursing students from the University of Hawaii and public health nurses.

The institutes were given by local personnel in so far as possible, including discussions and lectures by the local sanatorium physicians and social workers, the nutritionists from the Board of Health and social workers from the Department of Public Welfare. They were joined by the director of rehabilitation program for tuberculosis patients, the tuberculosis nursing consultant, and the educational director for the Bureau of Public Health Nursing, Territorial Board of Health, all of Oahu. Each institute closed by having case conferences presented for discussion which afforded opportunity for application of the principles brought out in the meetings.

Both institutes were well attended. On Maui there was a total attendance of 34 people and on Hawaii the number was 31.

This coming year the staff education program is to center about the maternal and child health field with special emphasis on child growth and development. The meetings on Oahu started in mid-October and the institutes for the other islands will be held at a later date.

Dr. Robert H. Marks
Director, Bureau of Tuberculosis
Territorial Board of Health, Honolulu

Dear Sir:

Your letter of May 2, 1946 was read at the meeting of the Nurses' Association, City & County of Honolulu, on May 6, 1946. The following motion was made and carried unanimously by our members:

"That the secretary be instructed to answer Dr. Marks' letter voicing our approval of and our willingness to participate in the planned program of routine tuberculin testing and x-raying of employees and the x-raying of the chest of every patient admitted to hospitals. That copies of this letter be sent to the Nurses' Association, Territory of Hawaii, the Honolulu Hospital Council and the Honolulu County Medical Society. That since this program is important to insure healthful working conditions for nurses, the Wages, Hours and Personnel Policies Committee be asked to appoint a member to work with Dr. Marks to help in following through on this project."

F. HELEN GAGE, R.N.
Secretary. Nurses' Association
City and County of Honolulu

NOTICE

Miss Mildred Manty is requested to communicate with the Secretary, Nurses' Association Territory of Hawaii, Mabel Smyth Building, Honolulu, at the earliest opportunity. Information from anyone who knows where Miss Manty is in the Territory would be appreciated, since she might not see this notice.

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HEALTH DEPARTMENT NEWS

Ten new nurses joined the staff of the public health nursing bureau during the past two months. From Minnesota came MARGARET JANE CHAPMAN, OLGA LARSON, BETTY STUPKA, GRACE M. TANABE, and PRISCILLA B. THORSON. All four of them received their public health nurse's training from the state university there.

Coming from the state department of health in Rexburg, Idaho, is MARGARET BARNES, who received her public health nursing certificate from the University of Washington in 1943. Also having a public health nursing certificate from the University of Washington is MARIE C. MILLER.

HARRIET ELIZABETH FAGGE was with the Visiting Nurse Service of New York as senior staff nurse for four and a half years before coming here. She received her B.S. degree at Columbia College and her nurse's training at the Medical College of Virginia University.

JEANNETTE BEDWELL was formerly with the army nurse corps in the Southwest Pacific in charge of a tropical disease ward. Previously she was assistant supervisor with the Visiting Nurse Association in Chicago.

From the province of Ontario comes GERTRUDE FINNEMORE, who was with the department of public health nursing there and who also did public health nursing work with the Ontario Red Cross. She received her certificate from the University of Toronto School of Nursing.

JEAN DOYLE was with the state bureau of health in Augusta, Maine, for three years before coming here. She graduated from the Peter Bent Brigham Hospital School of Nursing in Boston and received her public health nurse's training at Simmons college in Boston.

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TERRITORIAL NURSES' ASSOCIATION ANNOUNCEMENTS

The Nursing Service Bureau will continue under its present policy until further notice. Financial arrangements have recently been concluded to make this possible, according to Miss Virginia Jones, President of the Territorial Association.

The Territorial Nurses' Association has pledged full support of the campaign to eradicate tuberculosis. To those nurses who have not had a recent x-ray of the chest it is suggested that an appointment be made with their private physicians or the Board of Health, at the earliest opportunity. We can best show our sincerity in this pledge by being able to present a clean bill of health for all members of our organization.

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Of specific interest to nurses is the news that the United States Civil Service Commission has reclassified professional nurses employed under civil service. "Subprofessional" nursing positions are now in the Professional and Scientific Service. Not only has the status of nurses been raised, but salaries will start at $2,320 (P-1) instead of $2,100 (SP-5). The American Nurses' Association has been working with the Commission to bring about the reclassification since 1930. This action of the Federal Commission has given the nursing profession a long step forward. Other states will undoubtedly change their classifications to meet these standards.

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The Territorial Board for the Licensing of Nurses is fortunate to have engaged the services of Miss Josephine Valentine to conduct a survey of schools of nursing in the Territory. This study will require about three months to complete and will include planning of a practical nurse training program with recommendations for the setting-up of minimum standards as well as the survey of professional schools of nursing and recommendations for setting-up of minimum standards for evaluation by the Board of Registration.

Miss Valentine was recommended for this project by the National League of Nursing Education. She is well known in the field of professional and practical nurse education through her work as a member of the Board of Nurses' Examiners and Licensing of Nurses for the state of New York.

′ ′ ′

The National Nursing Council, which includes the American Nurses' Association among its 14 members, has requested a study of the socio-economic status of nurses. A questionnaire will be sent to a large representative sampling of registered nurses (around 40,000) to determine salaries, hours, working conditions and job attitudes. Face-to-face interviews will be held with a smaller group to determine why nurses leave their profession for other fields and why there is so much shifting from one position to another within the profession.

The U. S. Bureau of Labor Statistics has begun the study. The Council turned to this impartial, fact-finding agency because of its extensive experience in such programs and its trained personnel throughout the country. It was felt that neither nurses, doctors nor hospital administrators could analyze the situation objectively and that an outside agency should be called upon. The Bureau was interested in undertaking the project because it recognized the vital importance of an adequate nurse supply for the nation. The questionnaire was to be mailed in the early fall.

Miss Margaret Reid, Chairman of the subcommittee of the National Nursing Planning Committee of the Council, stated: "Each nurse who receives a questionnaire has a serious responsibility to answer promptly and fully, for her report on her own experiences will represent a number of nurses besides herself. It is significant that in this instance the nurse herself, rather than her employer or the public, is being asked how she feels about her work."

Information gathered will be compared with similar information that is available about such workers as librarians, teachers, dietitians and social workers. The nursing profession will assume responsibility for establishing professional standards based on the findings.

The Committee for the Study of the Structure of the National Professional Nursing Organizations appointed the Raymond Rich Associates in April 1946 to direct the study. Within the framework of the six sponsoring organizations (American Nurses' Association, Association of Collegiate Schools of Nursing, American Association of Industrial Nurses, National Association of Colored Graduate Nurses, National League of Nursing Education, National Organization for Public Health Nursing) Mr. Rich and his associates are analyzing functions and practices which are individualized, overlapping or duplicated. They expect to study structure and coordination not only nationally but in selected state and local areas where results promise to be most productive.

To more fully answer your questions on the study and its purpose, read the *American Journal of Nursing*, Volume 46, Number 7, July 1946.

Contributions from nurses and other sources and the grant of $12,500.00 from the American Red Cross established the initial fund for this study. However, additional funds are needed. If individual nurses who have not already contributed will send in at least one dollar ($1.00), the necessary amount will be obtained. Send contributions to Blanche Pfefferkorn, Treasurer, 1790 Broadway, New York 19, N. Y.



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(1) Sen, S.: Am. J. M. Sc. 211:289 (Mar.) 1946.

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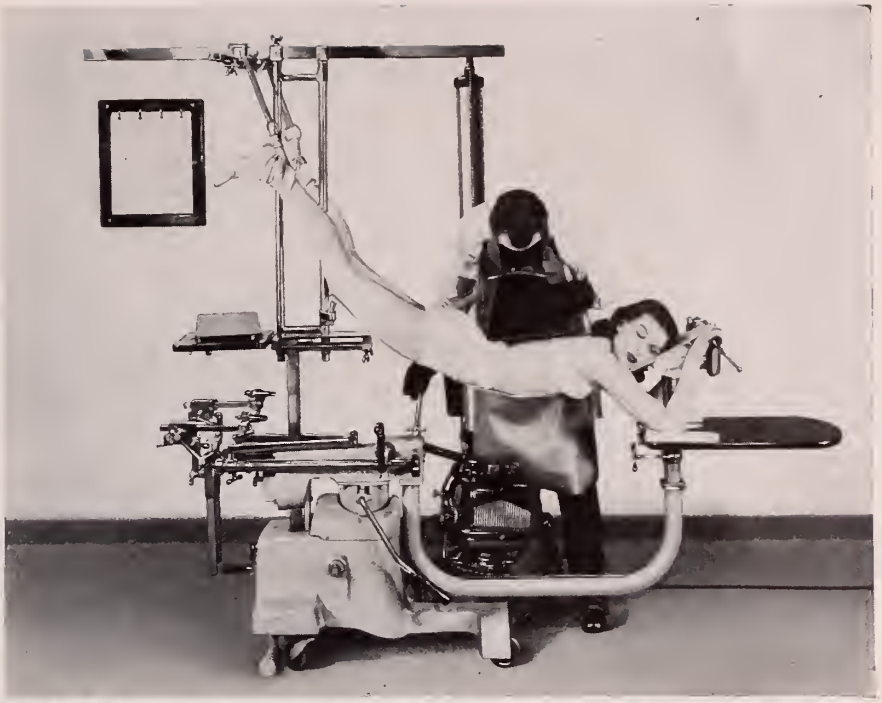
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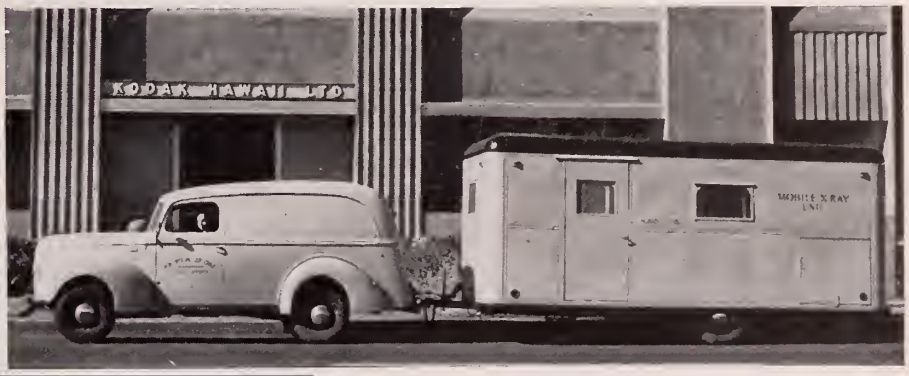
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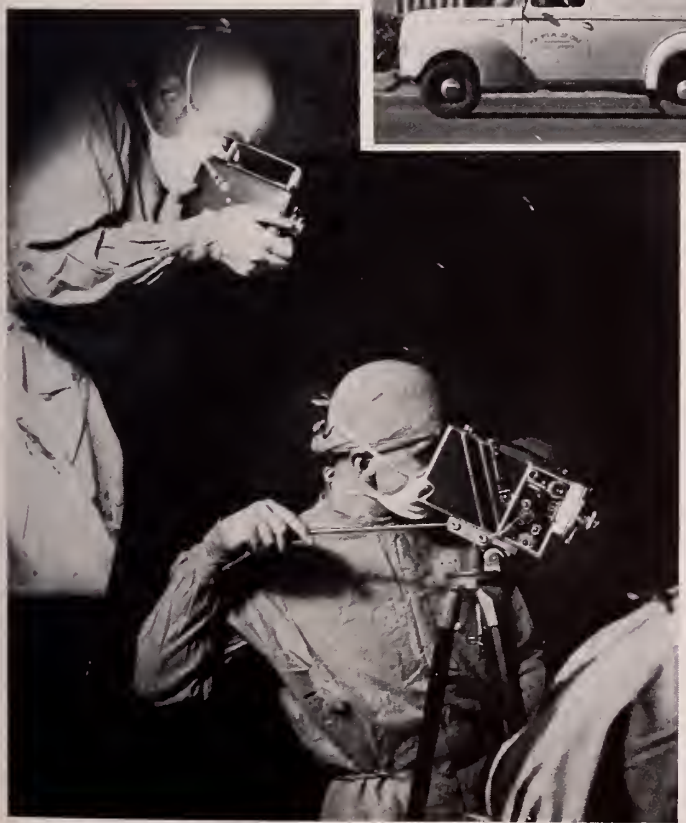
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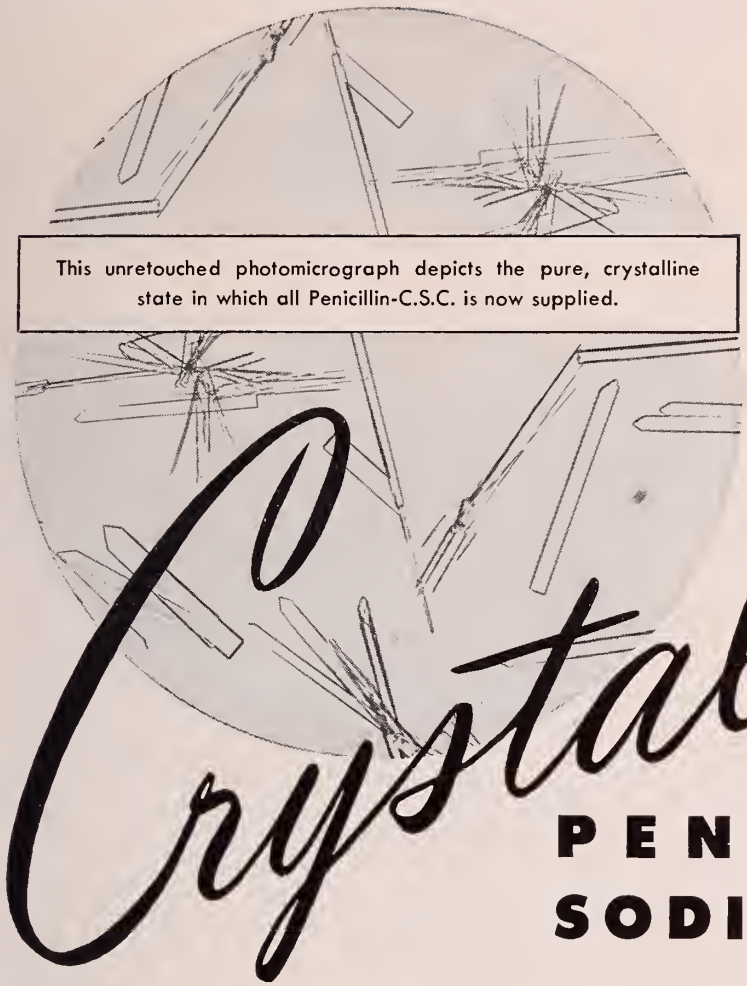


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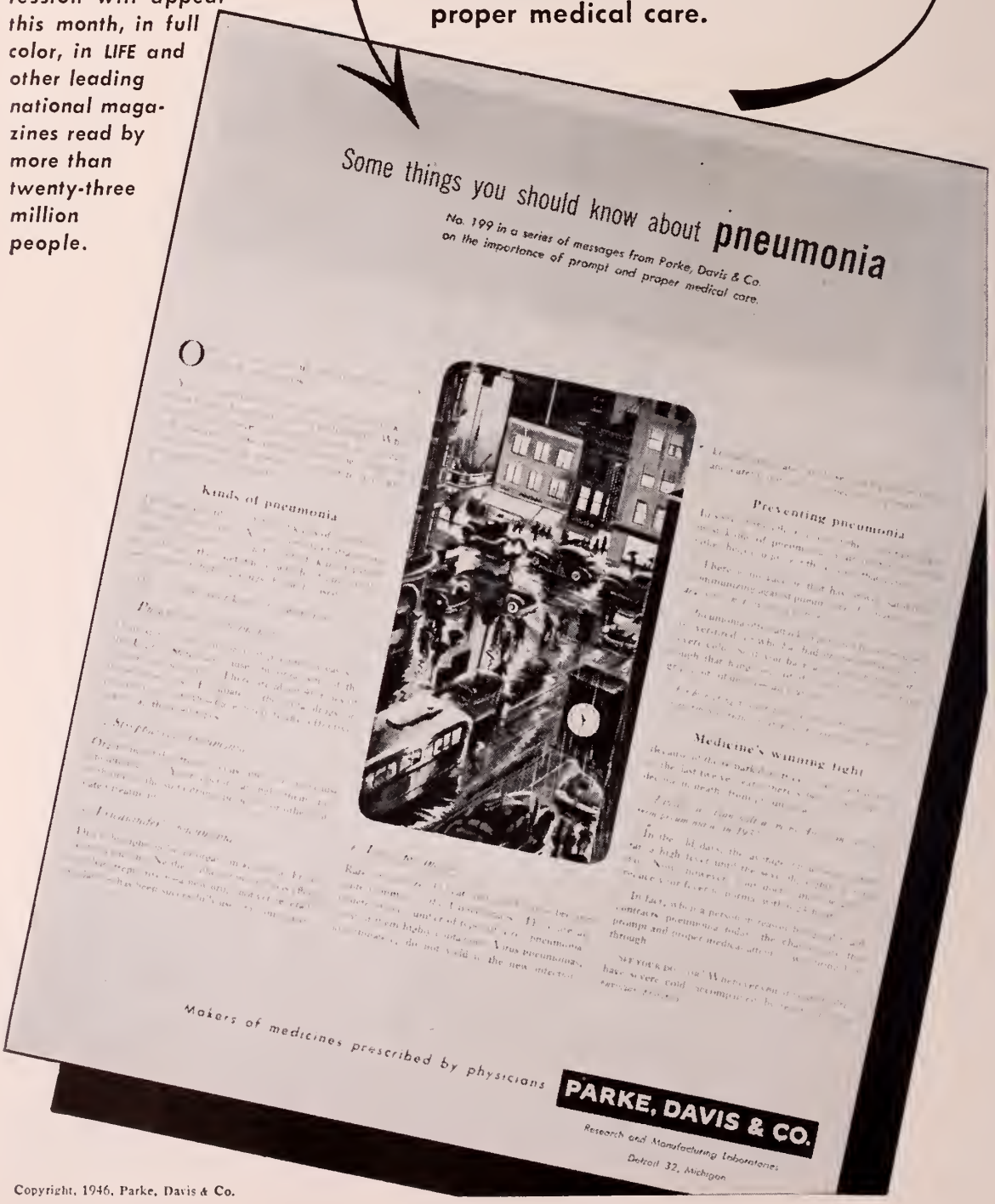
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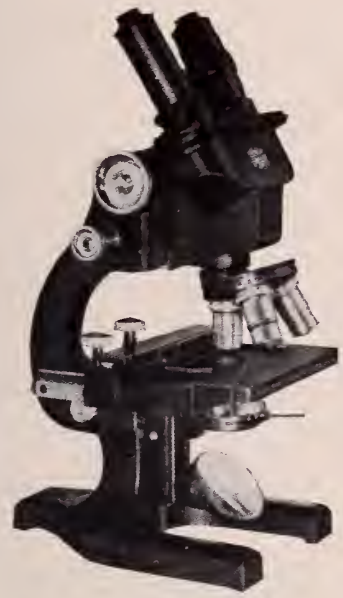
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*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, Am. J. Dis. Child. 66:1-11, July 1943.

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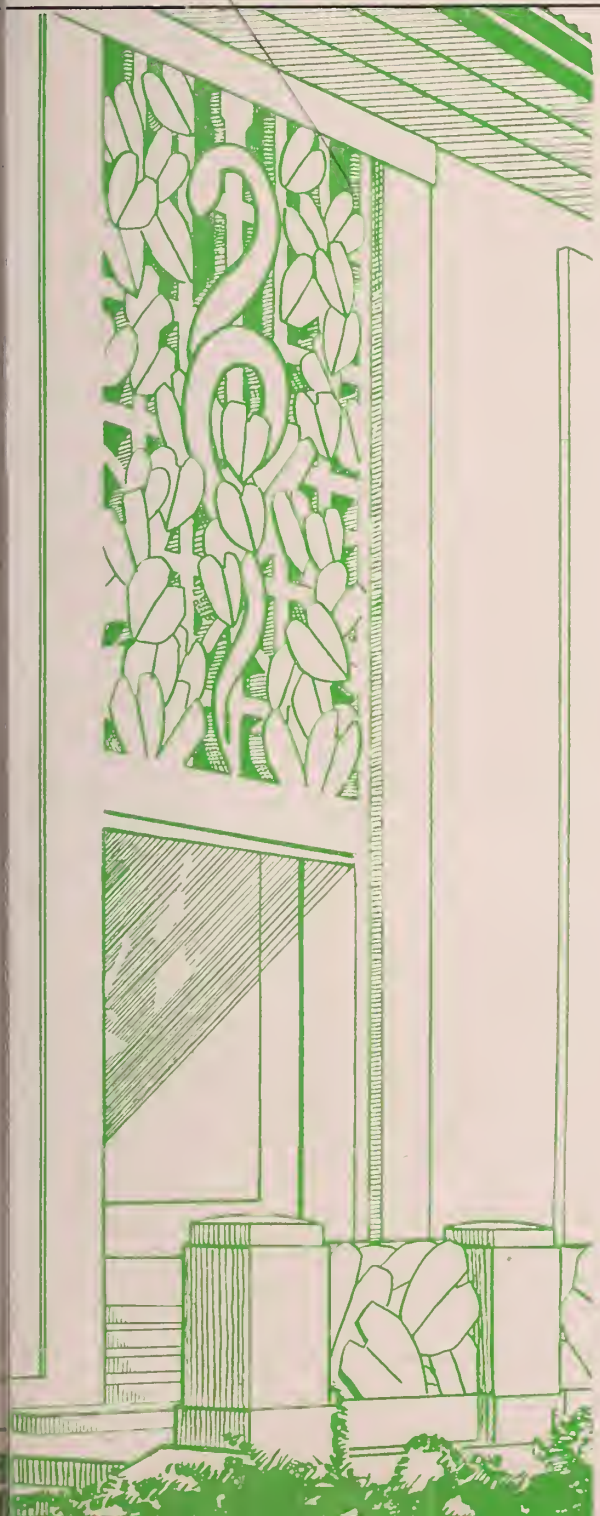
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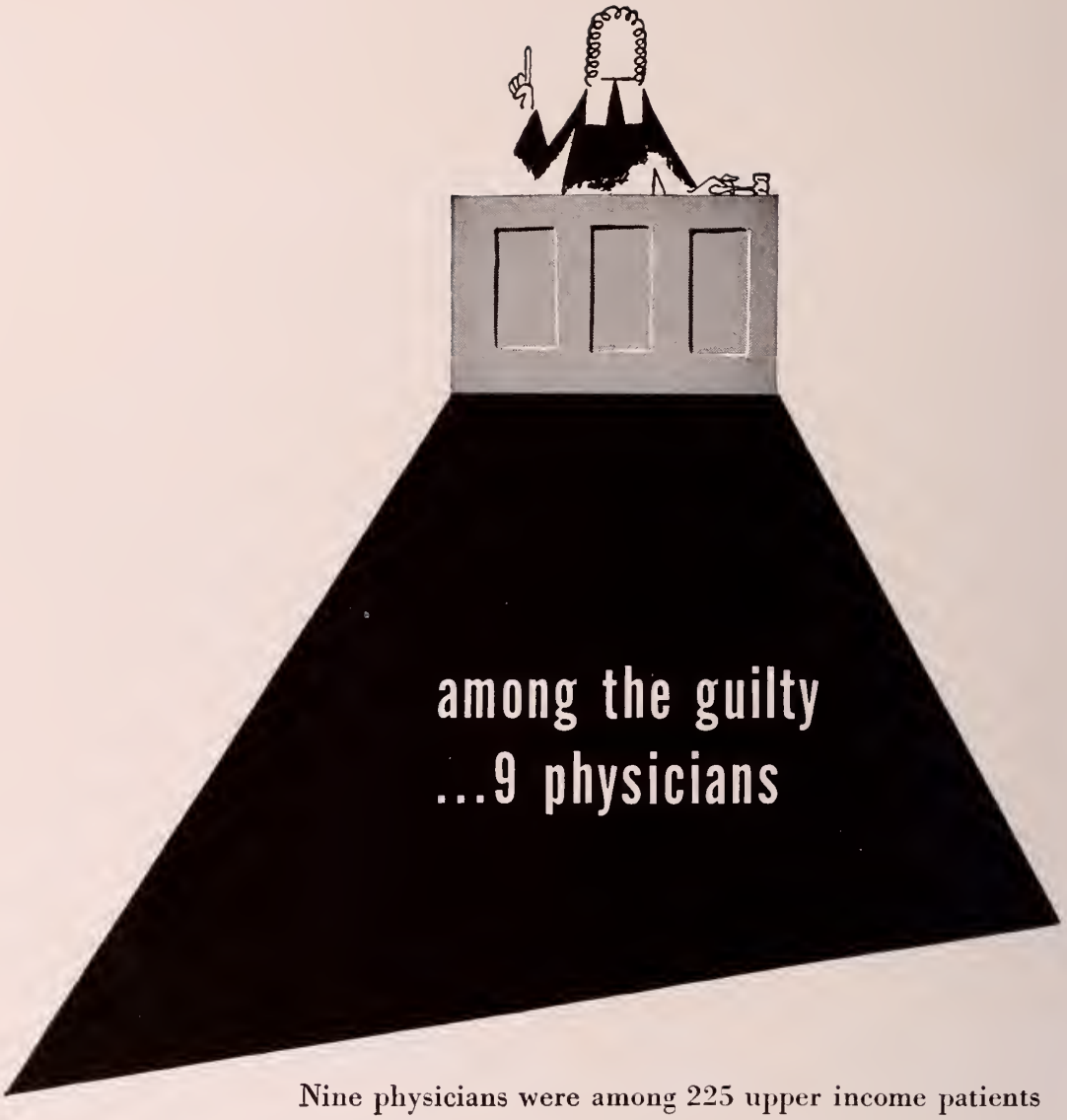
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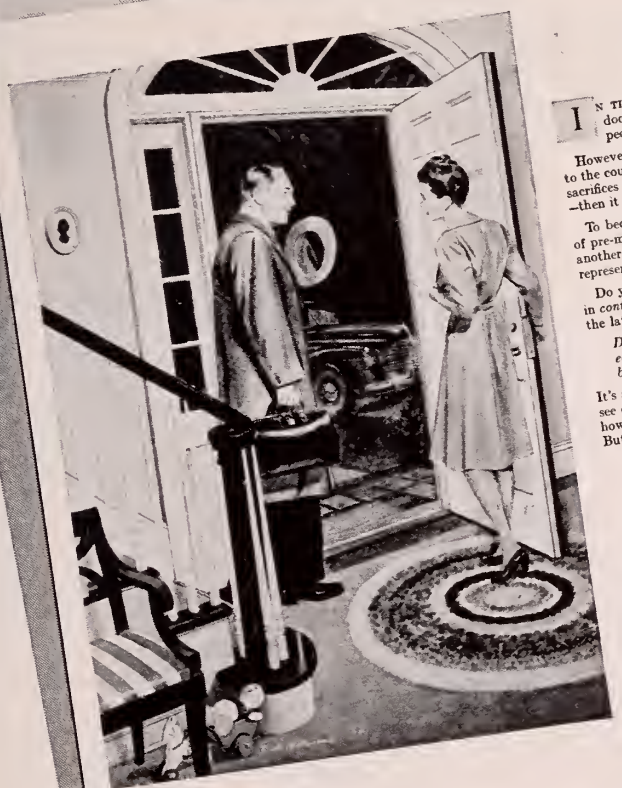
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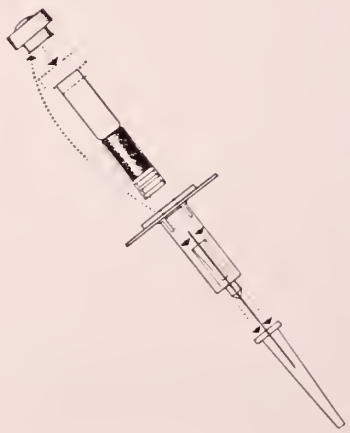


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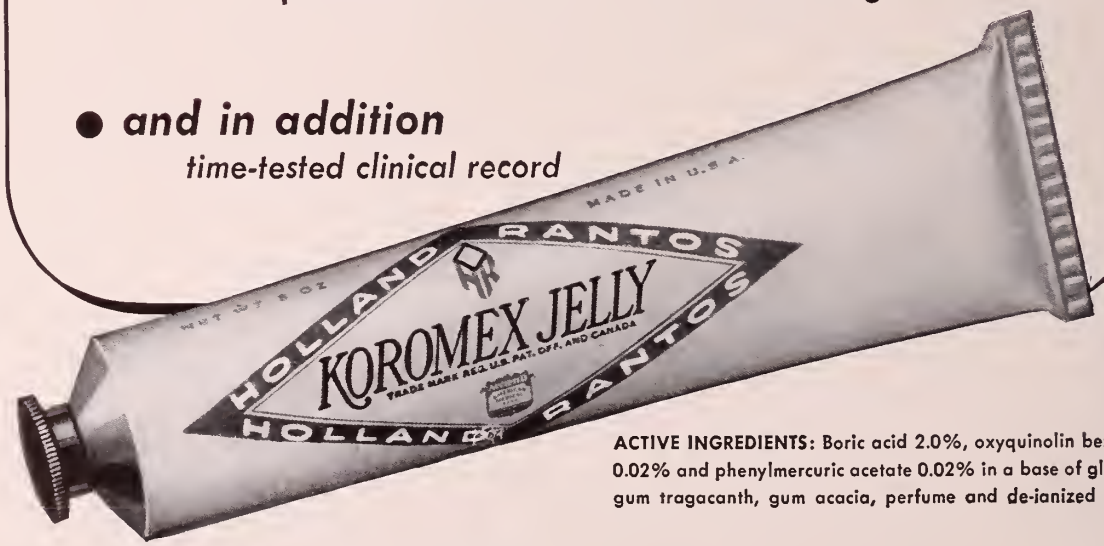
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**Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154.*
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60.

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Surgical Management of Bleeding Peptic Ulcer

LAURENCE M. WIIG, M.D.
HONOLULU

THERE CONTINUES to be considerable interest in the problem of the management of patients with peptic ulcers. The complications of the ulcers are still the basis for most of the surgical procedures. In regard to acute massive hemorrhage from a chronic ulcer, there still seems to be a tendency to deny patients the benefit of surgery at a time when it can be of most value and when the risk is least.

MORTALITY

It has been said that "patients rarely bleed to death from duodenal ulcer." This has given rise to the feeling that surgical intervention need not be considered except as a last resort. As Eliason[1] and many others have pointed out, when surgery is undertaken under these conditions, the chances of survival are practically nil. What can be considered an average mortality from acute hemorrhage? Reports vary from 1 per cent (Meulengracht[2]) to 25 per cent (Chiesman[3]). Heuer,[4] of New York, in his excellent monograph, "The Treatment of Peptic Ulcer" shows that the mortality rate throughout the United States for patients hospitalized for bleeding peptic ulcer is close to 13 per cent; in other words, one patient out of eight dies under medical treatment for massive hemorrhage. Walters and Cleveland[5] state that in their series 33 per cent of the patients over 50 years of age died from the hemorrhage, if treated medically. Reinhoff,[6] of Johns Hopkins, reports that in his series of 138 patients with massive hemorrhage, 12 bled to death without operative interference and 8 patients were operated upon in a depleted state with a 100 per cent mortality, giving a gross mortality of 14.5 per cent. I believe that these figures can be taken to indicate that the danger from massive hemorrhage in a chronic ulcer, whether it be duodenal or gastric, is greater than generally realized. Certainly every hospital with an active service of acutely ill patients has deaths from bleeding ulcers. The problem, then, is how to separate the patients who require surgery from those who do not, during the active phase of bleeding.

ANATOMIC CONSIDERATIONS

To understand this problem better it is well to consider the pathological anatomy. Examination of the specimens reveals that in the vast majority of fatal cases, or of cases coming to surgery, there is erosion into a large artery, which in the duodenum is usually the pancreatico-duodenal or one of its large branches. This is frequently on the posterior wall, and the pancreas is often the base of the ulcer. In other words, a penetrating type of ulcer is usually present, with bleeding as an additional complication, which helps to explain the medical intractability of this type of ulcer. The presence of arteriosclerosis is a frequent finding in the wall of the eroded artery, aiding in the continuation of the bleeding, due to the lack of contractility and elasticity in its walls. Hypertension, if present, also aids in dislodging the thrombus before it has become firmly attached to the vessel wall. The role of age, with its concomitant arteriosclerosis, is clearly brought out by Blackford and Allen,[7] who found 49 out of 51 of the deaths in their series occurred in patients over 45 years of age. Death under 45 is so rare that surgery seldom has any place in the treatment of these younger patients.

At the time of operation, technical difficulties are added to by the ready anastomosis of the arteries in this area. The gastro-duodenal artery is a branch of the hepatic, running between the duodenum and the pancreas, dividing into the right gastro-epiploic and the superior pancreatico-duodenal arteries. There is anastomosis with the right gastric artery, which comes off the hepatic separately. Coming from below is the inferior pancreatico-duodenal artery, a branch of the superior mesenteric. It is frequently impossible to control the bleeding except by the use of non-absorbable sutures ligating all these branches in

Read before the fifty-sixth annual meeting of the Hawaii Territorial Medical Association, May 3, 1946.

[1] Eliason, E. L., and Stevens, L. W.: The Surgical Aspects of Peptic Ulcer, Surg. Clin. North America, 24: 1282 (Dec.), 1944.

[2] Meulengracht, E. Behandlung von Hamatemesis und Melena mit uneingeschrankter Kost, Wien. klin. Wchnschr. 49: 1481 (Dec.), 1936.

[3] Chiesman, W. E.: Mortality of Severe Hemorrhage from Peptic Ulcer, Lancet 2: 722 (Oct.), 1932.

[4] Heuer, G. J.: The Treatment of Peptic Ulcer, Philadelphia, J. B. Lippincott, 1944.

[5] Walters, W., and Cleveland, W. H.: Results of Partial Gastrectomy for Bleeding Duodenal, Gastric and Gastrojejunal Ulcer, Ann. Surg. 114: 481 (Oct.), 1941.

[6] Rienhoff, W. F., Jr.: An Analysis of the Results of the Surgical Treatment of 260 Consecutive Cases of Chronic Peptic Ulcer of the Duodenum, Ann. Surg. 121: 583 (May), 1945.

[7] Blackford, J. M., and Cole, W. S.: Massive Hemorrhage from Peptic Ulcer, Am. J. Digest. Dis. 6: 637 (Nov.), 1939.

the vicinity of the ulcer; and the surrounding induration and inflammatory reaction makes identification of the vessels most difficult.

INDICATIONS FOR SURGERY: ACUTE BLEEDING

Before considering surgical intervention a definite diagnosis must be established. The causes of acute massive hemorrhage from the upper intestinal tract are many, although peptic ulcer accounts for 75 per cent of such episodes. Hemorrhage from acute gastritis or acute ulcer is never to be considered surgically; these conditions account for roughly 25 per cent of the acute bleeding cases, especially in the younger age group (under 45).

In an attempt to help select the type of case which will require surgery, Lahey[8] offered his descriptions of two distinct types of hemorrhage. "The first and more frequent type is that in which a single hemorrhage occurs, evidenced by the vomiting of blood or by the passage of a tarry stool, in conjunction with varying degrees of shock. The hemorrhage may continue or may be repeated during the following twenty-four to thirty-six hours, but with the application of conservative medical measures, the bleeding ceases and does not recur. With this type, surgery will not prove to be necessary. The other type is one of massive, recurrent hemorrhages in which large amounts of blood are lost, in which the hemorrhage is continued or repeated again and again on the same day or during the following days, uncontrolled by repeated blood transfusions. This latter type is the one in which surgery needs to be considered, and early consultation between the internist and surgeon should be carried out." Finsterer,[9] who has had a tremendous experience in this field, states that if operation is to be performed with a reasonable risk it must be done within the first forty-eight hours. Sir Gordon Gordon-Taylor[10] agrees with this dictum and adds that the "golden age of gastric surgery will have been attained only when all cases of hemorrhage from chronic ulcer come to operation within that space of time."

It is difficult to formulate rules about the treatment of this disease. Metheney and Stranahan[11] offer the following groups who are to be seriously considered for surgical treatment:

1. The patient who starts to bleed while in the hospital under medical treatment.
2. The patient hospitalized for bleeding ulcer, in whom the bleeding stops and then recommences.
3. The patient whose bleeding has continued over twenty-four hours.

To illustrate a nearly disastrous result in the medical treatment of this condition I would like to report briefly on a patient:

CASE REPORT

C.R.H., a forty-five year old white man, was admitted to the Shannon Hospital, San Angelo, Texas, on February 4, 1945, with chief complaints of vomiting of blood, passage of frequent bloody bowel movements and weakness, all of four days duration. In 1934, he had had an operation for acute perforation of a gastric ulcer. In September, 1944, he was hospitalized for severe gastric hemorrhage, receiving multiple blood transfusions. In the present illness he was treated elsewhere for four days and brought here by ambulance a distance of 250 miles. At the time of admission, he was found to be severely exsanguinated, dehydrated and prostrated. His pulse rate was 120 per minute and the blood pressure 90/60. His hemoglobin was too low to read on the colorimeter and his erythrocyte count was 1,700,000 per cubic millimeter. He was given 1,500 cubic centimeters of whole citrated blood slowly during the next twenty-four hours, following which his condition improved. Two days following admission (six days after onset of bleeding) he showed further signs of acute massive bleeding, following which he received 1,000 cubic centimeters of whole citrated blood, along with large doses of vitamins C and K. He was seen by me in consultation at this time. Surgery was not advised due to his poor general condition and the length of his illness. He was treated medically until the twelfth day of his illness when another more severe hemorrhage occurred, from which it did not appear that he would recover. After consultation, and at the insistence of his wife, surgery was agreed upon, even though he was stuporous, his pulse was imperceptible, and his blood pressure was recorded at 50/40.

A right subinguinal incision was made through which a #13 cannula was tied into the greater saphenous vein. One thousand cubic centimeters of whole citrated blood were given rapidly, followed by glucose and saline solution and one unit of blood plasma. Under light cyclopropane-ether anesthesia, an upper right rectus muscle-splitting incision was made. On the lesser curvature of the stomach near the pylorus was a markedly indurated, thick, scarred chronic gastric ulcer into which the right gastric artery was seen to penetrate. There was nothing to suggest malignancy. The liver and gall bladder were within normal limits. The right gastric vessels were ligated above and below the ulcer, following which a local excision of the ulcer was done, closing the defect transversely in three layers.

Pathological examination of the excised ulcer showed it to be a benign gastric ulcer in the center of which was a large artery, the lumen of which measured 4 mm. in diameter.

Five grams of sulfanilamide powder were placed in the abdomen. The wound was closed in layers with extra-peritoneal drainage. Through-and-through silk retention sutures were used. At the end of this procedure,

[8] Lahey, F. H.: Surgical Practice of the Lahey Clinic, Philadelphia, W. B. Saunders, 1941.

[9] Finsterer, H.: Surgical Treatment of Acute Profuse Gastric Hemorrhages, Surg. Gyn. and Obs. 69: 291 (Sept.), 1939.

[10] Gordon-Taylor, G.: The Attitude of Surgery to Haematemesis, Lancet 2: 811 (Oct.), 1935.

[11] Metheny, D., and Stranahan, A.: Surgical Arrest of Massive Bleeding Peptic Ulcer, Northwest Med. 43: 376 (Dec.), 1944.

his blood pressure was 120/44, pulse rate was 120 per minute and his condition appeared satisfactory.

Post-operatively, he was given continuous oxygen supplemented by frequent inhalations of carbon dioxide through the B-L-B mask, continuous gastric suction was used, and other symptomatic and supportive measures were carried out. Through the saphenous cannula 2,500 cubic centimeters of whole citrated blood, one unit of blood plasma, and glucose and saline solution were given in the following twenty-four hours. On the second post-operative day, his temperature rose to 106° F.; he became stuporous, and showed signs of atelectasis of the lower lobe of the right lung. The blood non-protein nitrogen rose to 110 mg. per cent, and the blood chloride level to 720, hemoglobin was 60 per cent of normal, and the erythrocytes were 3,310,000 per cubic millimeter. The urine showed four plus albumin, with many hyaline and granular casts. Penicillin was given parenterally, with an initial dose of 40,000 units followed by 20,000 units every three hours. One thousand cubic centimeters of whole citrated blood were given along with adrenal cortical extract, making a total of 4,500 cubic centimeters of blood in the first forty-eight hours post-operatively, and 7,000 since the onset of the illness. He gradually improved, but on the sixth post-operative day developed an extensive ilio-femoral thrombophlebitis in the right leg. Heparin was administered parenterally and dicumarol orally. On the seventh post-operative day he began to eat and was allowed out of bed on the fourteenth day. The retention sutures were removed on the fifteenth day, followed three days later by a wound disruption which was closed under local novocaine anesthesia with through-and-through silk-worm retention sutures. He was dismissed on the twenty-seventh post-operative day, and the wound healed gradually.

He was seen three months post-operatively, at which time he had gained 40 pounds in weight, and had returned to his former occupation in the oil fields. Hemoglobin and erythrocyte count at this time were normal. He had had no further bleeding.

COMMENT

In retrospect, this patient would have benefited tremendously by early surgery since it was obvious that the bleeding could not be controlled by medical means alone. Many of the post-operative complications would have been avoided had the operation been undertaken under more favorable circumstances.

INDICATIONS FOR SURGERY: CHRONIC BLEEDING

In the chronic bleeding ulcer and in the recurrent bleeding ulcer whether it be gastric, duodenal or marginal (jejunal), the indications for surgery are somewhat less controversial. The patient with a chronic, slow-bleeding ulcer producing marked anemia, which fails to respond to medical treatment, is certainly a candidate for curative gastric surgery. The patient who has recovered from two or more massive hemorrhages should be subjected to surgery when his condition permits. Jordan and Kiefer,[12] of the Lahey Clinic, have shown that following one hemorrhage, 40 per cent of the patients will fail to respond to medical treatment, and after two hemorrhages, 85 per cent fail to be relieved of their symptoms, or of subsequent bleeding, by means of medical treatment. The fact that severe bleeding has occurred indicates the presence of a hard, chronic ulcer, frequently of the penetrating type.

OPERATIVE PROCEDURES

When curative gastric surgery is undertaken, a high partial resection with removal of the antrum is necessary. Gastro-enterostomy alone has practically no place in the surgical treatment of the chronic bleeding ulcer, as it offers no protection against subsequent hemorrhage.

A new procedure which might be mentioned briefly for the surgical relief of peptic ulceration is supra-diaphragmatic division of the vagus nerves. Dragstedt[13] has reported his results with this procedure, and although it is too early to know what eventual place it will find in the treatment of peptic ulcer, it stands to occupy a prominent one, since it does attack the problem from the very important neurogenic or psychosomatic angle. The mortality has been nil. The operation itself is performed through the thoracic cavity, dividing the vagus nerves just above the diaphragm. It has produced excellent results in many types of peptic ulcerations, recurrent ulceration following previous gastric surgery being a particularly fertile field for its use. Increasingly favorable reports on the value of this procedure are forthcoming.

SURGICAL RISK

In the decision to recommend operation as an elective procedure the attending physician considers, and justly so, the risk of operation against the risk of keeping the ulcer. Heuer[4] gives some illuminating information on this point. He followed 651 peptic ulcer patients who were treated medically, of whom 62 died from all causes, and 22 of these died because of the ulcer. This gives a mortality of 3.5 per cent for the continued medical treatment in a carefully followed group of non-selected patients. To give an illustration of the present results and trends in gastric and duodenal surgery, the report for 1944 from the

[12] Jordan, S., and Kiefer, E. D.: Complications of Peptic Ulcer; Their Diagnostic Significance, J.A.M.A. 103: 2004 (Dec.), 1934.

[13] Dragstedt, L. R., Thornton, T. F., Jr., and Storer, E. H.: Supradiaphragmatic Section of the Vagus Nerves, J.A.M.A. 130: 764 (March), 1946.

Mayo Clinic[14] might be mentioned. In the case of duodenal ulcer, 12 per cent of the total patients for the year were subjected to surgery. Of these 67 per cent had a partial gastric resection, and 33 per cent had a gastro-enterostomy performed. The mortality rate from partial gastrectomies in the case of duodenal ulcer was 1.0 per cent, there being 2 deaths in 192 operations. For gastro-enterostomies the rate was 1.7 per cent, with 2 deaths in 130 patients. For benign gastric ulcer there were 122 partial gastrectomies with no deaths. For gastric carcinoma there were 8 deaths in 151 partial gastrectomies, or a mortality rate of 5.3 per cent.

[14] Counsellor, V. S., Waugh, J. M., and Clagett, O. T.: Report of Surgery of the Stomach and Duodenum for 1944, Proc. Staff Meet. Mayo Clinic, 21: 17 (Jan.), 1946.

It would seem fair to state that curative surgery can be carried out in the patient with peptic ulcer with no greater risk than the risk of keeping his disease, with the results of modern gastric surgery.

CONCLUSIONS

1. There is a considerable mortality from acute massive bleeding from the chronic peptic ulcer.
2. Surgery is frequently indicated in the patient over 45 years of age, in the acute hemorrhage.
3. In the chronic bleeding or recurrent bleeding ulcer, curative gastric surgery can be carried out with a lower mortality than medical treatment over a period of years.

Young Building.

The Diagnosis and Treatment of Early Conductive Deafness

L. Q. PANG, M.D.
HONOLULU

In comparison to the rapid strides made in the field of general medicine and surgery, accomplishments in the prevention, treatment and amelioration of hearing impairment have been slow. Partly responsible for this is the fact that the hearing loss is usually not detected until irreparable damage in the ear has been done. It is not generally known by the laity that a person may lose a very considerable amount of his original hearing without being aware of the loss. The consequent delay in seeking medical aid and the frequent failure to obtain satisfactory results have caused the widespread misconception that the treatment for ear conditions producing hearing impairment is largely futile. However, with the introduction of the audiometer, a new era in otology has dawned. Early impairment of hearing can be detected and treatment may be instituted before permanent and irreparable changes occur in the ear.

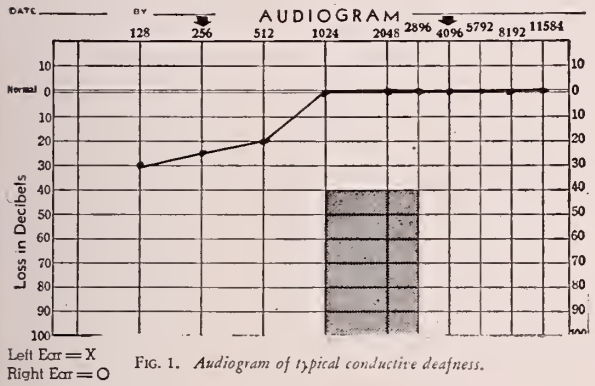


Fig. 1. *Audiogram of typical conductive deafness.*

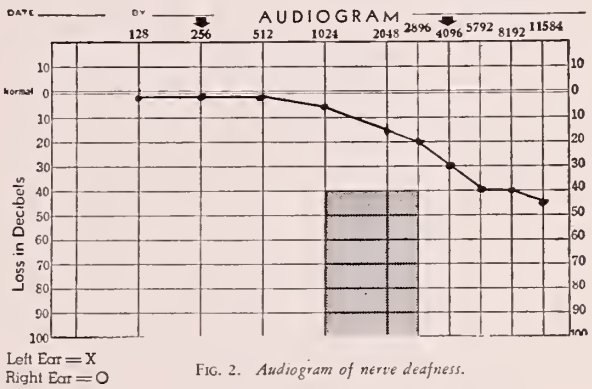


Fig. 2. *Audiogram of nerve deafness.*

It has long been the universally accepted teaching in otology that impaired hearing in the low tones with normal or good hearing in the high tones is indicative of a conductive deafness caused by some lesion in the middle ear or eustachian tube (Fig. 1). On the other hand impaired hearing in the high tones with good hearing in the low tones was taught as always indicative of a nerve or perceptive deafness, caused always by an inner ear lesion (Fig. 2). However, with the advent of the audiometer, Crowe and his associates at Johns Hopkins[1] have shown that this concept is not entirely true and that it needs revision. After fourteen years of intensive investigation, they were able to show that an impairment of hearing in the high tones with normal low tones may also be due to an early conductive deafness and that this is especially true in children. They found that in childhood, when hearing impairment is just beginning, an impairment of hearing in the high tones was the one symptom in common in all types of middle and inner ear lesions except otosclerosis. They also showed[2] that the most common cause of impaired hearing in the high tones, in children, is a long-standing partial obstruction of the eustachian tube by an overgrowth of lymphoid tissue in the nasopharynx and in the region of the eustachian tube orifices. That this occurs in adults also is proven by the experience at Mitchell Field, New York. Here, a nasopharyngoscopic examination of 1000 bomber crew members revealed that 31.5% of these healthy young adults had hyperplastic lymphoid tissue about the eustachian tube orifices. There was a striking correlation between the amount of lymphoid tissue around the tubal orifice and the incidence of aerotitis. This has been the universal experience of all the air forces.

Experimentally, Loch[3] has been able to confirm Crowe's clinical impression. By the use of an inflated rubber balloon in the nasopharynx, he was able to produce an acute obstruction of the eustachian tubes. He found that an uncomplicated tubal

Read before the fifty-sixth annual meeting of the Hawaii Territorial Medical Association, May 4, 1946.

[1] Crowe, S. J., and Baylor, J. W.: The Prevention of Deafness, J.A.M.A. 112: 585 (Feb. 18), 1939.

[2] Crowe, S. J., and Burnham, C. F.: Recognition, Treatment and Prevention of Hearing Impairment in Children, Ann. Otol. Rhin. Laryng. 50: 51 (March), 1941.

[3] Loch, Walter E.: The Effect on Hearing of Experimental Occlusion of the Eustachian Tube in Man, Ann. Otol. Rhin. Laryng. 51: 396 (June), 1942.

occlusion caused first and mostly a hearing impairment in the higher tones. If this obstruction continued, the hearing for the middle and low tones became slightly impaired. The hearing recovered promptly after the removal of the mechanical obstruction and after restoration of adequate ventilation of the middle ear.

The function of the eustachian tube is to ventilate the middle ear, the pneumatized spaces in the mastoid and petrous portion of the temporal bone and the peritubal cells. If the eustachian tube becomes partially or intermittently occluded, the air in the middle ear and the accessory cells is absorbed and serum and mucus are poured out to fill the space. Complete blockage of the tubes causes subjective symptoms but partial or intermittent occlusion especially in children produces a low grade or subclinical eustachian salpingitis which causes no subjective symptoms such as pain or tinnitus. The only subjective symptoms and signs are:-

1) An impaired hearing for the highest tones ranging from the 8000 D. V. to the 16000 D. V. These tones are far above the speech range, which lies between 250 and 3500 D. V. However, as the obstruction persists, changes in the mucous membrane of the middle ear progress and perception of the lower tones gradually becomes involved.

2) Hypertrophy of the lymphoid tissue in the nasopharynx and about the tubal orifices.

3) Retraction of the ear drums. Later, changes in the ear drums, with gradual, permanent thickening and opacity, occur.

The diagnosis of an early conductive deafness can only be made by a hearing test with an audiometer and by a careful examination of the nasopharynx and eustachian tube orifices.

In order to discover these cases early, the hearing tests must be done by an audiometer, preferably a pure tone audiometer,[6] and these tests should be done at some periodic fixed interval, preferably annually. In ordinary speech, good hearing in the middle of the scale, from 250 to 3000 D. V., is necessary. Until the hearing for the middle tones becomes impaired, children with partial obstruction may have no evident difficulty in hearing in school or at home, or, if they do, it is usually ascribed to inattention. If not diagnosed, the deafness progresses and gradually the lower end of the scale is involved, one octave after another. Thus the primary cause may be insidiously damaging the hearing apparatus for many years before it is recognized. Crowe presents some astounding figures to prove this point. In 1940, he and his associates examined 1,365 school children in Baltimore between the ages of 8 and 14 years. All but a small percentage of these children were thought by the parents and teachers to have good hearing. They found that:

1) Only 58.8 per cent had normal hearing in all tones: that is, from 32 D. V. to 16384 D. V.

2) 36.3 per cent had impaired hearing for the high tones with normal hearing for the low tones and voice. The defect was more common in boys by almost two to one.

3) Only 5 per cent had impaired hearing for high tones and low tones, due to chronic suppurative otitis media, otosclerosis, etc.

4) 70 per cent of the girls had good hearing for all tones compared to only 50 per cent for the boys.

5) Approximately 50 per cent of these children had their tonsils and adenoids removed but the incidence of impairment of the high tones was the same as the group which did not have a tonsillectomy and adenoidectomy.

A nasopharyngoscopic examination is very important and must be done by the use of a nasopharyngoscope. It is only by the use of this instrument that we are able to satisfactorily examine the orifices of the eustachian tubes and visualize the lymphoid hyperplasia about the eustachian orifice and in the fossa of Rosenmueller. Crowe states that in 75 per cent of children who have had their tonsils and adenoids removed before puberty, there is some degree of recurrence of the adenoids and a hyperplasia of the lymphoid tissue in the nasopharynx and about the tubal orifices which is identical to the "granular pharyngitis" so commonly seen in the nasopharynx. These lymphoid tissues react to infections by increasing in size and spreading to areas of mucous membrane normally free from it. An examination then of the nasopharynx is very important and should be done at least twice a year up to puberty.

Successful treatment of early conductive deafness as outlined by Crowe may be accomplished by:

1) Removal of the enlarged tonsils and adenoids followed by radiation of the nasopharynx to reduce the lymphoid tissue about the tubal orifices, in the mucosa lining of the tube and in the fossa of Rosenmueller.

2) Occasional inflation of the tube and middle ear.

3) General hygienic measures, diet, vitamins, changes of climate, treatment of allergic tendencies, and in short, everything that will improve

[6] Newhart, H.: Progress in Conservation of Hearing, Ann. Otol. Rhin. Laryng. 50: 129 (March), 1941.

the health of the child and lessen the frequency of colds.

The type of irradiation most commonly used is radium because it is easy and simple to apply.[4] The dosage can be accurately gauged and the radium can be accurately applied to the spot to be irradiated. The most common practice is the use

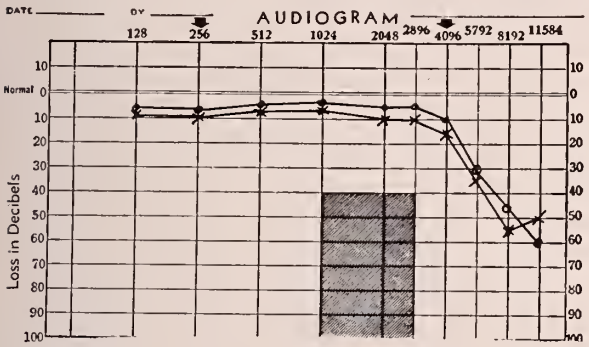


Fig. 3. *Audiogram, September 22, 1945.*

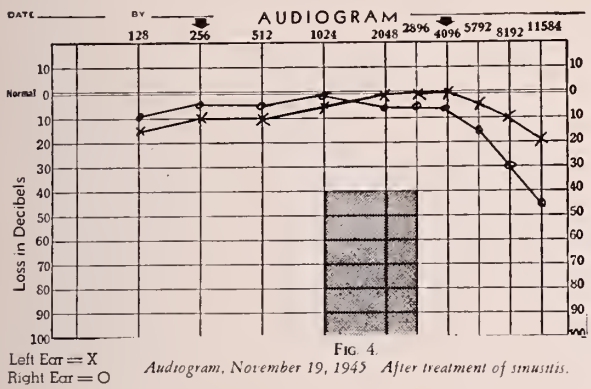


Fig. 4.
Audiogram, November 19, 1945 After treatment of sinusitis.

of a nasopharyngeal applicator which consists of a standard 50 mg. radium capsule attached to a pliable wire handle.[5] The usual dosage varies between 25 and 50 mg. hr. to each side of the nasopharynx. The treatments may be repeated at intervals of 30 days. Crowe uses radon and gives a dosage of 2000 mc. minutes and repeats at intervals of 4 weeks or longer. The difficulty with radon is that it is not easily available to most otologists. There are some who advocate the use of irradiation with x-rays.

The success of the treatment depends upon the recognition and treatment of the cases in the earliest stages, especially before there are permanent changes in the ear resulting from the long standing low-grade tubal obstruction and before the impaired hearing has become evident in the middle and low tone range. In these cases and even in some cases of longer standing, successful results have been obtained.

The following is a report of a typical case of conductive deafness:

R. O., 10 year old Filipino boy was first seen on September 15, 1945. The mother stated that the boy had difficulty in breathing and that he seemed to be hard of

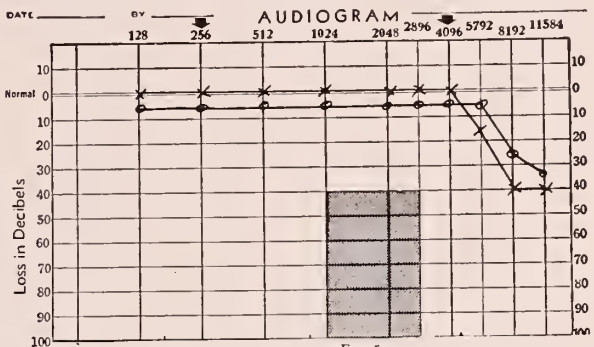


Fig. 5.
Audiogram, January 3, 1946. After radium, November 22, 1945.

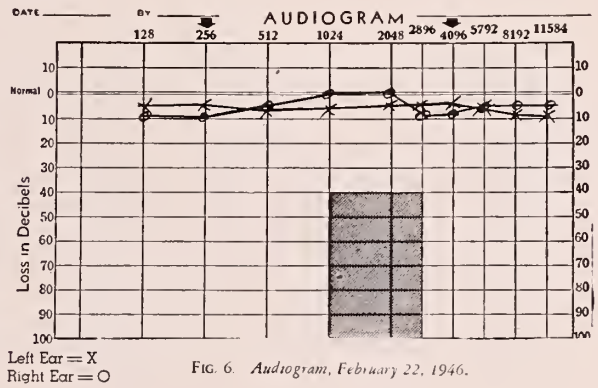


Fig. 6. *Audiogram, February 22, 1946.*

hearing at times. Examination revealed the following: In the right ear, the drum was markedly dull and retracted and there was a large chalk deposit. The left ear drum was dull and retracted. There was mucopurulent discharge in both middle meatuses of the nose and some discharge in the nasopharynx. The tonsils and adenoids had been removed cleanly. There was a marked hypertrophic granular pharyngitis. Since the patient had a sinusitis, we thought that the patient's difficulty was a eustachian salpingitis secondary to a sinusitis and proceeded to treat his sinusitis. On September 22, 1945, an audiogram was done which revealed normal hearing for the low tones and an impairment of hearing in the high tones (Fig. 3). Periodic treatment of his sinuses was continued until November 19, 1945, at which time we thought that his sinusitis had cleared up. An audiogram taken then revealed a slight improvement, but there still was an impairment in the highest tones (Fig. 4).

A nasopharyngoscopic examination done revealed much hypertrophied lymphoid tissue about the tubal orifices and in the fossa of Rosenmueller. On November 22, 1945, 50 mg. hr. of radium was applied to each tubal orifice. On January 3, 1946, an audiogram showed a marked improvement but not a complete return to normal (Fig. 5). A repeat audiogram on February 12, 1946, showed a return of the hearing to normal.

[4] Emerson, E. B., Dowdy, W. H., and Healy, A. C.: Use of Radium in the Treatment of Deafness by Irradiation, Arch. Otolaryng. 35: 845 (June), 1942.

[5] Brown-Farrior, J., and Richardson, G. A.: Nasopharyngeal Radium Applicator, Arch. Otolaryng. 35: 811 (May), 1942.

SUMMARY

With the use of the audiometer, it is possible to detect early hearing impairment before any permanent damage is done to the ears. It is now definitely established that an impaired hearing in the high tones with normal hearing in the low tones is not always pathognomonic of a nerve perceptive deafness but that it may also be indicative of an early conductive deafness especially in children. The most common cause of this condition is a hypertrophy and hyperplasia of the lymphoid tissue in and about the eustachian tube which produces a partial and intermittent tubal obstruction thus causing a low grade or subclinical eustachian salpingitis. Since this condition does not produce any subjective symptoms, it is often not recognized until later in the course of the disease.

This condition is relatively common in children and can be diagnosed early only by the use of an audiometer and by a careful examination of the nasopharynx with the nasopharyngoscope. The treatment of these cases by irradiation with radium is usually very successful especially if it is begun early. It is therefore, very necessary that a hearing program be instituted in the grade schools where annual hearing tests with an audiometer are done and cases which show an impairment of hearing in the high tones should have a nasopharyngoscopic examination and those with the hyperplastic lymphoid tissue in and about the tubal orifice should be treated with radiation in order to insure a normal functioning of the tubes. Only by this method can we see the final fulfillment of Crowe's prophetic statement that the number of deaf adults in the next generation could be reduced by 50 per cent.

52 South Vineyard Street.

DISCUSSION

DR. F. J. PINKERTON: Mr. President, Members of the Association, Guests: Dr. Pang's paper is a timely one, and the way he presented it, and the points he made, I think, are very important to the profession at large. He did not go into the highly controversial diagnostic points that otologists as a rule discuss, but he made it plain enough so that every practitioner, no matter how little his interest in otology, could understand and appreciate it. I think we might have titled his paper as one of a symposium on the conservation of hearing. His last remark about the future—we are to expect a reduction in the adult reduced hearing by 50 per cent—has entirely to do with the business of conservation of hearing. We are pretty well covered in the Territory with audiometers and audiometric examinations but oftentimes I believe they are carelessly and improperly done, and a bad audiometric reading is oftentimes very misleading and sometimes worse than none. When we speak of a person who is deafened, or when a definition is offered, it almost always involves itself into the audiometric conception of the spoken voice. The person is not considered by the man on the street, and too many of the profession, as being deafened or suffering reduced hearing until it is difficult to talk to him, so that the common criterion for measuring reduced hearing is whether the person can hear ordinary conversation or not. Speaking for the otologist, it's too frequently the case that the patient gets to you only when he has had a long series of embarrassing experiences having to do with not hearing ordinary conversation. It is too often the case that mothers, fathers, and members of the family charge the child suffering from reduced hearing with a sort of an inattentiveness. Someone some place has referred to that as "domestic deafness." The fellow who reads the newspaper in the morning and only grunts an answer to his wife's intelligent remarks is charged with reduced hearing. I have had many experiences with wives telling me that their husbands were not hearing well because they never seemed to hear what they had said. That occurs in adults and it certainly occurs in children. Children are charged with inattentiveness because they don't want to hear their mothers say "no" to what they particularly want to do. The result is that for a long period of time the child goes around charged with something the mother thinks is just stubbornness or cussedness or domestic deafness. Then when he comes to the doctor or is picked up in the school examinations, we find great reduction in hearing, and some considerable harm has been done. No matter what your treatment is, you'll never get that child back to normal except in those cases of removing eustachian tube obstruction. No matter how carefully adenoids are removed, there frequently remains around the pharyngeal orifice of the large eustachian tube in children a goodly amount of lymphoid tissue which is not easily removed by surgery. There your radiation technique in the eustachian nasopharyngeal orifice area is indicated. I have also found that sometimes people with nasal polyps in the earlier stages respond favorably to radiation technique. These cases are sent to me by different doctors who are interested in it. It took a while to finally learn the technique, and I think Crowe's technique is absolutely right. Everyone, however, has his own ideas about the amount of radium, the time, and the method of application. But irradiation technique does just what Dr. Pang has told you would happen but not nearly as often as we would like it to happen in the neglected case, because we don't see him early enough. Conservation of hearing therefore is a responsibility of every citizen of the community and every doctor. A goodly number of general surgeons are doing tonsil and adenoid surgery. It's very troublesome to do much with a poor kid that has eustachian tube closure because of the scar tissue that resulted from too vigorous removal of adenoid tissue. You know the anatomy of the area around the eustachian orifice: the overhang of thickened tissue on the top anterior part of the eustachian orifice is easily damaged by a curette, and I recommend, and I think this is the common recommendation by those who have given it some thought, that it's wise to look into the nasopharynx with the nasopharyngeal speculum such as the Yankauer's or the palate retractor and satisfy yourself, if you are dealing with a person with reduced hearing, that as much of the adenoid tissue as is easily removable surgically, is removed at that time. Too vigorous curettement around the eustachian orifice does more harm than good because we can treat the lymphoid

hyperplasia that remains, but we cannot break through a web or a mass of scar tissue that may result from the curette tearing away the opening of the eustachian tube. This method that Dr. Pang has described to you is particularly applicable to children. It does not apply as much to adults. But it becomes, as I said before, a conservation of hearing program technique. The conservation of hearing and the prevention of this 50 per cent of reduced hearing in the adult of tomorrow is only going to be gained by the conservation of hearing in that youngster.

Now, to measure hearing, to produce a graph such as Dr. Pang has shown you, is not just a slap dash procedure. It isn't a thing that anyone can do, although very little training is necessary to teach the ordinary person to do a creditable audiometric measurement. First of all, don't try to do it on the street corner where all the automobiles are going by, because you will have to write off a certain percentage of your findings as due to the masking effect of outside sounds. The ideal method of course is the sound-proof chamber, which not many offices provide. But a quiet room away from traffic, noise and conversation, and distracting sounds is necessary in the measurement of the hearing curve of children. Adults can exclude those sounds fairly well, but not children. They are distracted by everything that goes on around them.

The Honolulu Society for the Hard of Hearing, which was first created back in 1929, I think, and was allowed to die and was reorganized ten years later, did a flourishing business and a tremendous amount of good, especially for the adult deafened. It is also about to die today. A letter was written the other day from the secretary saying that she had resigned her position and there was nearly $1000 left in the kitty and she wanted to know what to do with it. I don't think the medical men can afford to let the Honolulu Society for the Hard of Hearing die now, because it's going to be a long time before our present good method of conservation of hearing in children is going to catch up with the adult deafened population. If you're a careless observer you would say that deafness is very definitely on the increase. I am not so sure that it is, and I haven't any authority for saying that excepting my own opinion. I think that it *seems* to be. It's apparent rather than real. Seems to be on the increase because we are using more care in screening out the children, picking them up early. The educational program that exists in the schools today in getting these children into the hands of competent medical men is done so much earlier now than it was even a decade ago. We see this great army of children coming in with reduced hearing; we think off-hand, "deafness is on the increase"; it's more apparent than real. Some authorities tell us that modern living, the wear and tear on the nervous system, the high tension of life, affects the ability to hear as it does every other function of the body. I think Dr. Pang has done a good job by presenting this subject in a simple manner for a group of men who only want to know the practical side and are not interested in the controversial points of hearing, diagnosis, defects, methods of treatment, etc.

Dr. Clarence Trexler: We try to find what we can subjectively and objectively in these cases. But there is a period when we are not doing enough for these children. That is up to the time when you can get a reading on the audiometer. As a matter of fact the otologist rarely sees these cases until deafness is well under way. In many cases, at least, that is true. Therefore I think these cases demand treatment in children in a more rational manner than in the past. I know we have had a lot of ephedrine and benzedrine put down these babies' noses. It is physiological to have a lot of lymphoid tissue in the nasopharynx, especially in children. I think it's that period between the time the baby is born and when you can get an audiometer test that is most important. And I do think that the children should have the benefit of the best treatment possible, referred from one to the other if necessary. Until now there have been a lot of experiments done by putting all kinds of astringents into the babies' noses. We know what would happen if you put too much benzedrine or ephedrine in an adult's nose. You finally get to a point where this will not do what it would do in the first instance or what it is expected to do at the marked period of treatment.

The Scope of Psychiatry

E. A. STEPHENS, M.D.
KANEOHE

FOR SEVERAL DECADES psychiatry has been insistent in its demands for recognition as a scientific discipline with an important contribution to make to the medical and social sciences. The indifferences, and at times opposition, expressed by medicine towards psychiatry, stemmed largely from the personal experience of physicians with the static school of psychology which concerned itself with behaviorism at the conscious level, a sterile concept doomed to desuetude by a dynamic psychiatry that sought to explore and interpret the ontogenetic forces, largely unconscious, that operate from infancy onwards and which also took cognizance of the phylogenetic factors entering into the molding of the organic and individual personality of man.

Modern psychiatry is no longer solely concerned with descriptive terms and classification of mental illnesses. It now seeks to understand the functions of the total personality in terms of the psychobiology and psychopathology involved. It holds the view that there are personality factors in medical illnesses, and pathological and physiological aspects to many mental illnesses. Psychiatry believes it has a contribution to make in the fields of internal medicine, pediatrics, geriatrics, and most other special branches of medicine. It insists that every illness has an emotional component, varying in degree to be sure, but nevertheless important enough in many instances to retard or prevent recovery.

Psychosomatic is the term most commonly used to conveniently express the idea that psychic factors may cause physical symptoms. But as one writer[1] points out, the term threatens to become a slogan, generating enthusiasm while it lasts, but burning out from its very intensity. This need not happen if the trend in medicine which it represents is allowed natural and sound growth and a chance to become incorporated into the main stream of medicine. Indeed, the term *psychogenesis* would have been adequate for this purpose, because it was never intended to imply that somatic factors are absent. Long continued hate or rage with associated feelings of guilt and anxiety, for example, may operate to produce arterial hypertension, but it does so by its effect upon the physiology of the organism. The term *psychosomatic medicine* is therefore an unfortunate one, because it still carries the implication that psyche and soma are separable. The first issue of "Psychosomatic Medicine" attempted to dissipate this view by an introductory statement which read as follows:

> "Emphasis is put on the thesis that there is no logical distinction between 'mind and body,' mental and physical. It is assumed that the complex neurophysiology of mood, instinct and intellect differs from other physiology in degree of complexity, but not in quality. Hence again divisions of medical disciplines into physiology, neurology, internal medicine, psychiatry and psychology may be convenient for academic administration, but biologically and philosophically these divisions have no validity. It takes for granted that psychic and somatic phenomena take place in the same biological system and are probably two aspects of the same process, that psychological phenomena should be studied in their psychological causality with intrinsically psychological methods and physiological phenomena in their physical causality with the methods of physics and chemistry."

PSYCHIATRY IN MEDICINE

The application of psychiatric principles in medicine has scarcely been explored. For instance, the significance of anxiety as expressed in dreams may often explain common disorders of the heart beat. The person who awakens frightened because of palpitation due to paroxysmal tachycardia, ectopic beats, and possibly paroxysmal auricular fibrillation, is suitable soil for the development of a cardiac neurosis, and if such attacks are frequent or of long duration, there is every possibility that structural damage to the heart may ensue. What is the role of anxiety dreams in the production of excessive gastric secretions? Does epigastric pain occurring so often in the early morning have any relationship to anxiety during sleep? Does the heart laboring against arterial hypertension fail to get much needed rest during sleep, because of anxiety dreams? Every internist should be aware of the significance of dreams and their implications as personality or toxic factors.

Psychotic episodes that occur during such acute diseases as pneumonia, influenza, typhoid fever, acute rheumatic fever and so forth, or during the post-febrile period, also fall to the practitioner and not the psychiatrist for management. He should also be alert to recognize the mental enfeeblement that occasionally occurs after such infectious diseases.

[1] Daniels, George E.: Bulletin of the Menninger Clinic, 9: 63 (March), 1945.

Congestive heart failure, diabetes, the cardiovascular renal syndrome, diseases of the liver and tuberculosis may evoke psychotic disturbances requiring early recognition and care.

PSYCHIATRY IN SURGERY

The orthopedist should recognize the fact that certain persons seem prone to accidents largely determined unconsciously to gain an objective or stemming from an unconscious death wish. The latter phenomenon is readily demonstrable among psychotic patients.

The surgeon should be prepared to recognize unconscious factors that impel a person to undergo a surgical operation. When the clinical findings do not conform with the complaint, the surgeon must be aware that the symptoms may be conversion phenomena being used by the patient to gain some emotional advantage.

PSYCHIATRY IN PEDIATRICS

In the field of pediatrics the opportunities for the application of psychiatric knowledge know no limitations. The insight gained by investigation into instinctual psychology is more than a little terrifying. The delicate balance that must be maintained between love and hate, in their widest connotation, compels one to wonder how any individual attains normal adjustment. Fortunately, the regulatory mechanism of psychic forces is as effective as is the physiological. Psychiatrists and pediatricians are coming to believe more and more that this regulatory mechanism should be interfered with as little as possible. But many modern parents attempt to apply pseudoscientific theories in child raising which may in fact be more harmful than benign ignorance. What is so often interpreted as frustration in the child is actually a manifestation for needed guidance and discipline.

In the chronically ill child simple psychotherapy is of the utmost importance. The well trained pediatrician will devise ways to encourage the rheumatic child, to help the physically handicapped by means of vocational guidance, to assist the epileptic youngster in accepting measures that promote his socialization, and by other ingenious methods seek to prevent withdrawal from reality of the child inclined towards brooding or self-pity.

The modern pediatrician should be well acquainted with Freudian formulations[2] even though he is not prepared to accept psychoanalytical doctrines without reservation. Although Freudian concepts remain a somewhat controversial subject among psychiatrists, the fact remains that noteworthy advances have been made by their application in the mental hygiene of childhood and adolescence and as a therapeutic discipline in adult psychoneuroses. No longer does the name of Freud evoke outbursts of violence at psychiatric meetings.

The pediatrician recognizes the emotional satisfaction obtained by the breast-fed infant; he is aware of the emotional conflict inherent in jealous situations of siblings; he can sense the preference of a child for one of the parents without admitting the existence of incestuous drives; he takes cognizance of the existence of childhood sexuality as a natural phenomenon which seeks emotional maturity along with physical growth and of the accidental distortion of the sexual instinct that may ensue before the goal of normal heterosexuality is reached.

As a mental hygienist, the pediatrician has a great responsibility and an unusual opportunity to correct unhealthy situations in childhood and thus prevent the development of conflicts that so often play an important role as a cause of adult unhappiness and illness.

Instinctual psychology is admittedly complex, but the pediatrician can render valuable guidance by observation of elementary principles which emphasize:

(a) Healthy socialization of the growing child,
(b) Avoidance of despotic discipline,
(c) Emancipation from parental ties to promote self-reliance and heterosexual interests.

The work of Dr. Jacobson[3] in Honolulu schools is of considerable interest to child psychiatrists and pediatricians. He is able to demonstrate that many children regarded heretofore as feebleminded or retarded actually have adequate intellectual resources, but cannot use them because of emotional disturbances. Emotional impoverishment in such children causes antisocial behavior, negativism, obstinacy, seclusiveness and a host of other manifestations of poor social adjustment. The technique employed is a dynamic modality which refutes the doctrines of stationary intelligence and recognizes the potentialities in every youngster. This approach will serve to remove the stigma of feeblemindedness from many children who would otherwise be so labeled.

PSYCHIATRY IN GERIATRICS

Geriatrics offers a fertile field for the application of the finest ideals of medical practice. The aging process itself has emotional concomitants of

[2] Brill, A. A., ed.: The Basic Writings of Sigmund Freud, Modern Library, New York, 1938.

[3] Jacobson, J. Robert: A Method of Psychobiologic Evaluation, Am. J. Psychiat. 101: 343 (Nov.), 1944.

great importance even when no pronounced physical disability exists.

Feelings of inferiority, often concealed; irritability, memory defects, insomnia, impairment of judgment, sexual deviations, hypochondriacal ideas, ruminations upon death, and emotional instability, all of these in varying intensity, should be sought out and properly managed. The practitioner, by tactful guidance, may prevent many of the tragedies inherent in the aging process. It is well known that many elderly persons become the victims of unscrupulous promoters and thus suffer financial losses and embarrassment to themselves and their families. The family physician should be able to recognize the appearance of moral and ethical deterioration in order to prevent such needless mental suffering.

It should be remembered that avitaminosis may intensify cerebral encephalopathy. The arteriosclerotic and senile psychoses seen in institutions are frequently complicated by a pellagrous syndrome, the intensive treatment of which effects improvement of the psychosis.

PSYCHIATRY IN GYNECOLOGY

Only brief mention can be made of the psychiatric problems of gynecology and obstetrics. The onset of menstruation, followed by courtship and marriage, has emotional upheavals that are not always fully appreciated by the family physician. Wise counsel in these crises of female life is the responsibility of the physician.

The anxiety that accompanies pregnancy and parturition may reach serious proportions and psychotic episodes may occur. Psychotic breakdown with the onset of the climacteric is not uncommon, usually taking the form of melancholia or a paranoid syndrome. In the former, precautions against suicide must be taken.

PSYCHIATRY IN NEUROLOGY

The neurologist should have a sound knowledge of psychiatry. Psychotic manifestations are common in brain tumor, head trauma, Huntington's chorea, multiple sclerosis, paralysis agitans, Wilson's disease, epilepsy and many types of feeblemindedness.

MISCELLANEOUS APPLICATIONS

Outside of medicine, psychiatry today contributes in an important way to criminology, sociology, anthropology, political science, religion, education, industry and other disciplines that seek to understand man and his motivations. The rapprochement already established will eventually be mutually beneficial.

The psychiatry of the future will concern itself not only with interpersonal, but with international relationships as well. Detailed discussion of the potentialities in all these fields would unduly prolong this communication. But one need only reflect on the dangers inherent in political leadership disorganized by emotional imbalance. We need but recall how the paranoia of Hitler and the German people and the overcompensatory inferiority feelings of the Japanese brought to the world the greatest tragedy in the history of mankind.

How often within our own nation have we come near to disaster because of unhealthy mental attitudes on the part of our leaders?

Perhaps the day will come when policy-making leaders of the state will be compelled to submit to psychiatric studies to detect emotional imbalances. From the viewpoint of the psychiatrist emotional maturity and stability are more important than intellectual attainments.

Civilization becomes more complex every day. There is already sufficient evidence to indicate that national tension and apprehension followed the introduction of the atomic bomb. There is widespread fear that more deadly weapons will be developed. National anxiety, long continued, is certain to have a deleterious effect upon the national health. Every physician should recognize this new threat to the security and peace of mind of the individual, because it may be a concealed component of obscure illness, physical or mental. The importance of emotional factors, therefore, will be greater than ever before.

However, it should be remembered that fear is only a symptom. The psychiatrist looks beneath the surface and then finds that fear itself is largely secondary to other unconscious factors, principally greed and aggression. Modern psychiatry believes it has something to offer a world that seems bent on destroying itself. It believes that commonly accepted ethical and religious doctrines are insufficient to hold the unconscious aggressive instincts of man in check.

INSTITUTIONAL PSYCHIATRY

Consideration of the scope of psychiatry would be incomplete without reference to institutional psychiatry.

The nature of psychoses with their associated behavior problems and long duration compelled physicians and the public to turn to the state for their management. Thus psychiatry became the first form of state medicine.

Unfortunately, psychiatric practice today has no specific remedies at its disposal. In the treatment of the psychogenic disorders, electric shock, insulin shock and prefrontal lobotomy currently in use are purely empirical.

The nearest approach to specific therapy is narcoanalysis whereby one may explore the psychodynamics and psychopathology and evaluate the etiologic importance of the various components.

Unfortunately, though one may piece together the fragments of distorted feeling and thinking that go to make up the psychosis, the knowledge thus gained is not applicable in the major psychoses for the simple reason that the patient cannot tolerate insight. It is this resistance to insight that contributes most to the prolongation of the disorder.

Re-education by means of occupational therapy, recreational activities with others of the group, and enforced socialization in a mental hospital are palliative measures sometimes effective but so often frustrated by the deep-sentiment nature of the disturbance.

The prevention of psychosis is of the utmost importance because admission to a mental hospital is in many instances a therapeutic handicap. There many individuals find social security and equality, freedom from fear, ample time for daydreams, and, unless interrupted, the attainment of a fantasy existence. Then, like the canary in the cage, the psychotic attains some measure of contentment at the sacrifice of freedom and self-reliance.

Too often, the parents contribute to the prolongation of the psychosis by obstructive measures, motivated by unconscious wishes to bind the patient to them by invalidism, thus further delaying the emancipation from parental ties which should have occurred long before.

The complex phylogenetic and ontogenetic forces that contribute to the formation of pathological human nature present a challenge to medicine in general, and psychiatry in particular, that will demand the greatest ingenuity and skill if mental disorders are to be held in check as the complexities of life increase.

Territorial Hospital, Kaneohe, Oahu, T. H.

First Annual Report of the Rehabilitation Department

LEAHI HOSPITAL—JUNE 30, 1946

ON APRIL 1, 1945, a Rehabilitation Department was established at Leahi Hospital through the joint efforts of the Tuberculosis Association of the Territory of Hawaii and the hospital. The first full year of operation under this cooperative arrangement finds the basic organization of the program completed. This Department was entrusted with full responsibility, under the direction of the Director of Leahi Hospital, for the development of a long-term program of rehabilitation for persons with a history of tuberculosis on a territory-wide basis. In addition to this long-term planning, it was entrusted with the more immediate responsibility of establishing, first, a coordinated in-hospital program for the patients at Leahi and, second, a post-hospital program of follow-up for discharged patients.

IN-HOSPITAL PROGRAM

The development of the in-hospital phase is in line with the national rehabilitation program which emphasizes the finding and serving of disabled persons early in their period of disablement before they become discouraged and apathetic. This Department's initial task consisted mainly of the setting up of procedures and policies aimed at coordinating and integrating the already existing non-medical services into an effective program for the assistance of patients in their adjustment to the hospital regimen and also to the community in which they will find themselves upon discharge. A system of referral for patients for rehabilitation was worked out between this Department and the doctors, nurses, social workers, occupational therapists, teachers, and patients, the purpose of which was to centralize the control of patients' activities to the end that each patient referred to this Department for rehabilitation service shall have a definite plan which governs his activities during the period of hospitalization. All activities of patients including occupational therapy, general education, prevocational education, and other in-hospital activities such as the publication of the hospital magazine and patient self-government were placed on a prescription basis. It is important to note that nearly all patients, regardless of age, sex, or degree of disability, are rendered services of various kinds by this Department. However, it must be emphasized that only those who are feasible and susceptible for rehabilitation training, retraining, or selective placement are provided the more intensive services of vocational planning, vocational testing, prevocational training, and later, vocational training and financial assistance in the carrying out of their rehabilitation plans.

Counseling is the one service in the total rehabilitation process which is extended to all patients. For this reason, it is considered by authorities on vocational rehabilitation as the core of the rehabilitation process around which all other services revolve. This counseling service consists mainly of educational advisement, dissemination of health information, occupational information and testing.

As part of this counseling service, an up-to-date occupational information library and a complete testing service were established. During the past year, in order to provide the rehabilitation worker or patient with immediate access to occupational materials on specific educational and occupational opportunities, a plan for filing unbound occupational information was set up. This has proved to be indispensable in the counseling process. Information on trends in the local labor market, reprinted articles on job fields, and "Occupational Briefs" describing the essential requirements for specific jobs are assembled and filed for ready reference for the guidance of patients in the process of job selection.

All testing done during the past year has been on an individual basis. Standardized tests for the determination of mechanical and clerical aptitude, tests of mental ability, achievement tests, and interest and personality inventories are selected, administered, and interpreted in the light of all other available information about a patient. Those in use by this Department include the Minnesota Spatial Relations, the Minnesota Manual Dexterity, the O'Connor Finger and Tweezer Dexterity, the Purdue Pegboard, the Minnesota Mechanical Assembly, the Minnesota Paper Form Board, the Minnesota Vocational Test for Clerical Workers, the Bennett Stenographic Aptitude Test, the Bernreuter Personality Inventory, the Kuder Preference Record, and a complete set of Cooperative Achievement Tests for high schools and early college levels.

POST-HOSPITAL PROGRAM

The post-hospital phase of this program has been worked out mainly in cooperation with the Outpatient Department of Leahi and four community agencies: (1) the Division of Vocational Rehabilitation of the Department of Public Instruction, (2) the United States Employment Service, (3) the Sheltered Workshop of the Tuberculosis Association, and (4) the public schools.

The Outpatient Department of Leahi Hospital played a vital part in the development of this phase of the program. Prior to the establishment of a Rehabilitation Department, the Director of the Outpatient Department carried on many of the functions and activities relating to the rehabilitation of the ex-tuberculous. At the present time, all prospective rehabilitees referred to this Department by the O.P.D. are selected on the basis of their present work capacity. Procedures have been established between the O.P.D. and this Department to eliminate duplication of services in meeting requirements of prospective employers of ex-patients, insurance agents, and various governmental agencies. All matters relating to the employment, training, or retraining of patients under the medical supervision of the O.P.D. are cleared, at the present time, through this office. Consultations at regular intervals with the Director of the O.P.D. regarding the medical history of each patient referred for rehabilitation have resulted in quicker and more satisfactory service to both the patients and their employers.

Cooperative arrangements have been completed between this Department and the Division of Vocational Rehabilitation in two matters of vital importance in the rehabilitation of the tuberculous. (1) It is agreed that all persons with a history of tuberculosis, other than those referred to the Division by this Department since April 1, 1945, regardless of origin of referral, shall be reported to this office for investigation and recommendation before being accepted for rehabilitation service. (2) That this Department shall act in an advisory and consultative capacity to the Division on all matters pertaining to the training, retraining, or placement of ex-tubercular patients. This cooperative arrangement which eliminates duplication of services and which consequently prevents confusion has worked out well during the past year. The work of this Department is closely related to the activities of the Division of Vocational Rehabilitation because the actual carrying out of the rehabilitation plans initiated in the hospital rests with the Division. It is the responsibility of the Division to initiate and supervise the training recommended for an ex-tubercular patient and to assist in his ultimate placement in a suitable occupation in terms of his handicap.

Working relationships have also been established with the United States Employment Service for their services in the selective placement of ex-tubercular patients. Interviewers and other personnel directly connected with the selective placement of persons handicapped with a history of tuberculosis are furnished complete information regarding the present medical status, the work capacity, the educational and work histories, and other pertinent data regarding the general employability of an ex-tuberculous patient for their guidance in making the proper placement. The cooperation and interest shown by the U.S.E.S. staff in carrying out the recommendations of this office regarding the placement of ex-tuberculars is commendable.

During the past year there has been a revival of interest among ex-tubercular patients in the services rendered by the Sheltered Workshop of the Tuberculosis Association of Hawaii for hardening purposes. Although handicapped by limited facilities and personnel, the Workshop provides the most effective medium through which a patient moves toward the goal of complete economic self-sufficiency, because it is here that his work tolerance for full time training and employment is tested. It aims to overcome the handicap of the individual by graduated remunerative work, the work dosage of which is prescribed and supervised by the O.P.D. physician based on clinical findings. At the present time, the activities are supervised by a manager and two assistants who are employed by the Tuberculosis Association. The activities consist of woodworking, dressmaking, net weaving, and book binding. The average attendance at the Sheltered Workshop during the past year was 24 per month as compared to 8 per month prior to April, 1945.

The relationship between the public schools and this Department has taken the form of cooperation in the matter of facilitating the enrollment of an ex-patient so that a satisfactory program consistent with his present physical condition is worked out. The public schools have also cooperated in the matter of acceptance of advanced credits gained by the patient as a result of studies completed during the period of hospitalization. In addition, the registrars and principals of the various schools have cooperated fully by furnishing school records promptly for our information and guidance of the student during hospitalization. They have also cooperated with this Department in

assisting ex-patients in transfers from one school to another.

Besides the services rendered to patients in cooperation with the above mentioned four community agencies, contacts and working relationships have been established with the following agencies: the University of Hawaii, the employment offices of business and industry, the Public Health Nursing and Tuberculosis Bureaus of the Board of Health, and the Department of Public Welfare.

The first annual report of the work of this Department would be incomplete without a statement on the vital part played by the Tuberculosis Association of the Territory and its active Rehabilitation Committee in preparing the way for the establishment of this program.

The Association has been in the forefront in the campaign for the rehabilitation not only of the tuberculous, but of all physically handicapped persons. This leadership in the field of rehabilitation dates back to a meeting of the Rehabilitation Committee of the Tuberculosis Association held June 10, 1934. From the minutes of this meeting is quoted the following paragraph which illustrates the early interest of the Association in the concept of rehabilitation in the Territory of Hawaii:

"It was moved by Mr. Hamilton, seconded and unanimously carried that the secretary communicate with Mr. Oren E. Long, stating the willingness of the Tuberculosis Association to cooperate with other organizations in an effort to secure legislation for a Vocational Rehabilitation Bureau, and further, that this organization knows there is a very real need for such work among the tuberculous."

The Association not only led the way for the establishment of a general rehabilitation program for the Territory, but also cleared the way for the establishment of the program here at Leahi through the following activities which are considered by rehabilitation authorities as necessary preparation for an effective beginning. These are: (1) the development and maintenance of a year round health education program, (2) the provision of facilities for the extension of early case finding, (3) the establishment of effective working relationships and collaboration with local health, education, and welfare agencies, (4) the organization and maintenance of a Sheltered Workshop for physical hardening, and (5) the maintenance of a sound organization of seal sales.

CASE LOAD ANALYSIS

Since the establishment of the program at Leahi a year ago, 284 patients were processed as potential cases as of June 30, 1946, and studies made to determine eligibility and susceptibility for rehabilitation. This number constitutes approximately 25% of an estimated potential case load of 1200. Of the 284 patients referred, 156 or 55% were referred by the Outpatient Department of Leahi and 45% were referred by ward physicians. There were 154 males and 130 females. Three-fourths of the patients were under 35 years of age at date of first contact by this Department while 92% were between the ages of 15 and 44; 82.4% were citizens. About 3 out of 4 men were unmarried at time of initial contact; this proportion holds true also for women. Of the 284 patients processed, 51 were unemployed at remunerative employment prior to admission to the hospital and 18 did not indicate whether or not they were working. Of the 51 unemployed at the time of hospitalization, 33 were students, 11 were housewives, and 7 had no occupation indicated. Of the group who were employed before their illness, half of them were engaged in unskilled or semi-skilled labor. Other occupational groups were skilled-foreman, clerical, owner-proprietor, and food handler. There were 5 patients in the sub-professional and professional groups. Three-fourths of the patients had completed the 8th grade or better with 87 high school graduates and 8 college graduates. At the time of referral, 36% of the patients had disesase which was minimal in extent, 52% were moderately advanced, and 10% were far advanced. For 2%, the stage of disease was not reported. Thus, almost 9 out of 10 patients referred for rehabilitation had a diagnosis of minimal or moderately advanced disease at the time of admission. Seventy-seven per cent of the patients had good prognoses at the time of referral, 12% had fair prognoses, and for 11% the prognoses were not indicated.

At the time of referral, 55% were arrested including a few apparently arrested, 30% were quiescent, 14% were unstable or active, and for 1% the clinical status was not reported.

At the time of referral, 88% of the patients had negative sputum and 9% had positive sputum; for 3% the sputum status was not reported. Of the 284 patients processed through this office during the past year, 81% have had or are now having one or more types of collapse therapy while only 19% have had bed rest only.

Of the total cases (284) processed, 238 received rehabilitation services. This number is broken down as follows: 25 were closed as rehabilitated, having been placed in employment following services rendered; 48 were closed after interview, counseling, and guidance services having been

rendered; 8 were closed with service but not employed because of personal factors, illness, aggravated disability, or death; and 157 were in process of rehabilitation on June 30, 1946. 44 cases were reported, but status not yet determined. Two cases declined services.

STAFF

The entire program during the past year was carried on by a Rehabilitation Executive and his secretary. (A rehabilitation worker was added to the staff effective July 1, 1946.)

SUMMARY AND CONCLUSION

One of the purposes back of the development of the rehabilitation program at Leahi was that this project, with adaptations to meet the peculiar conditions of each area, should serve as a model for future projects in each of the other tuberculosis hospitals in the Territory. Our experience of the past year has demonstrated that an effective rehabilitation program can be developed for tuberculous patients only if the following non-medical services of rehabilitation are sufficiently developed and coordinated:

In-Hospital

1. A simple system of referrals and records for patients' activities.
2. Medical social service for patients and their families.
3. Occupational therapy service for diversion and physical hardening.
4. Educational services for general and prevocational studies.
5. Counseling and guidance service.
6. Testing service.
7. Occupational information library.
8. Recreation and entertainment facilities.

Post-Hospital

1. Facilities for physical hardening.
2. Adequate training facilities.
3. An informed selective placement service.
4. Adequate financial assistance for discharged patients during period of convalescence.
5. Adequate vocational and social follow-up.

It is needless to mention that without the interest and wholehearted cooperation and assistance of doctors, administrators, nurses, teachers, social workers, occupational therapists, and patients in the hospital and vocational rehabilitation agents, employment interviewers, public health nurses, public assistance social workers, and others in the community, the program as outlined would have been an impossibility.

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[EDITORIALS]

MEDICAL ECONOMICS ADVISOR FOR TERRITORIAL MEDICAL ASSOCIATION

The office of medical economics advisor created for the Honolulu County Medical Society last November was made a Territorial Association office in December by action of the other three component societies. All four societies have now voted an assessment of $75 per member for a period of one year, and it only remains to select, as this is written, a suitable person to fill the job.

The purpose of the office, as outlined by the committee entrusted with its creation, is to provide an agency of the medical association which will, on a full time basis, evaluate such unsolved problems as the actual cost of medical practice, the costs of medical care, the suitability of specifically scheduled fees, the advantages or disadvantages of different methods of remuneration for medical services, and so on; and which will be able on the basis of such information to advise the officers of the county societies or the territorial organization how most effectively to act upon the economic problems which are being presented to them with increasing frequency.

The ideal candidate for the job would be a Superman—or Superwoman—indeed. He—or she—would need to be familiar with local problems, economic, social, political and medical; to be familiar with local personalities and institutions and agencies; to have the doctors' viewpoint clearly in mind; to understand something of the source and nature of the pressure being brought to bear on legislative bodies for the socialization of medical care; to be familiar with—and wary of—the multitudinous cliches with which plans for such socialization are always well adorned; to be familiar with the basic principles governing successful voluntary medical prepayment plans, and likewise with the salient features of the unsuccessful ones; and a good share of intelligence, tact, and backbone would be helpful as well.

The unfortunate part of it is that any candidate who falls appreciably short of these criteria is likely to be no more helpful an advisor than the average doctor, who himself fills a good many of them. What we must have is someone who knows a good deal more about these problems than the best-informed doctors in the community know. Only on someone of *that* caliber will we be justified in spending the sizeable sums of money that this economics institute is going to cost.

AMERICAN ACADEMY OF PEDIATRICS CHILD HEALTH STUDY

The physicians of Hawaii are being asked to participate in the Study of Child Health Services presently being conducted all over the country by the Academy of Pediatrics.

Studies and surveys seem to be the order of the day, but this one is unique in that the profession itself is seeking an evaluation of the care it is providing and is ready to do some careful planning for the future. Thus, the physicians, unquestionably the ones who know what constitutes good care and who for the most part provide that care, are accepting the challenge for the improvement of medical services to children.

One of the fundamental purposes of the Academy Study is to stimulate local groups to discover for themselves the needs of their own communities and to plan the facilities to meet those needs. Essentially, this means the collection, on a vast scale, of reliable data. Although the members of the Academy of Pediatrics are committed to carry out

the task, the undertaking cannot succeed without the aid of individual physicians everywhere.

To obtain a complete picture of the existing child health facilities, data will be collected by means of questionnaires (schedules) on every important aspect of pediatric and medical service. Four major categories will be studied: hospital facilities; community health services, both official and voluntary; distribution, qualification and activity of professional personnel; and pediatric education.

The administration and conduct of the study is on a state-wide basis, under the direction of the Academy State Chairman. In Hawaii, Dr. Joseph Palma, by virtue of holding that office, is responsible for organizing the program and coordinating the many activities involved.

Procedures for obtaining the necessary information have been simplified as much as possible. Every effort has been made to utilize available local sources, but certain essential data can be obtained only through the individual physician. Physicians in private practice will be asked to complete a *short one-page questionnaire* concerning their pediatric practice.

This study is important. It is an opportunity for physicians to investigate their own affairs. Unless physicians undertake such tasks for themselves, others will do so, as has been demonstrated already by the abundance of legislative activity in various phases of medical care.

YEAR'S RESIDENCE CLAUSE APPROVED

By a vote of 154 to 96, the members of the Hawaii Territorial Medical Association voted against the repeal of the one-year residence requirement for medical licensure by the forthcoming session of the Legislature. Approximately 100 members refrained from voting.

The vote was cast in the form of a questionnaire, as ordered by the Council at the annual meeting last summer; members were asked to say "I favor repeal" or "I do not favor repeal" "of the one-year residence law by the next session of the Legislature." All questionnaires returned, except one, were signed.

One comment was written on a ballot opposing repeal, as follows: "Groups should live up to the spirit as well as the letter of the law." One can hardly quarrel with this suggestion; indeed, it seems that it might well be extended to individual physicians, tuberculosis sanatoria, the Board of Health, the Territorial Hospital, and plantations, as well as groups. Like the 4-miles-per-hour speed limit once in effect in Prague, Czechoslovakia, the residence law would probably *have* to be repealed if everyone obeyed it.

Those favoring repeal of the law were more inclined to comment on their position. One said, concisely, "better repeal than evasion." Three qualified their vote by saying that some other restriction would be needed to prevent an influx of semi-retired, vacation-seeking physicians. One suggested that temporary suspension be effected for selected applicants. One indicated that next year would be a better time for repeal than now, because of local doctors not yet having all returned from military service. One criticized the law as "un-American" and added that "no other state has such a law." We have verified, and can confirm, this last observation.

Of the 24 physicians licensed to practice in Hawaii during 1946, it is interesting to note that only 3 were of Japanese, 6 of Chinese, and 15 of Caucasian ancestry; 11 were born in Hawaii, and 13 on the mainland or abroad; 20 had their interne training on the mainland or abroad, and only 4 had it in Hawaii! If the basic purpose of the law is to "save Hawaii for the Hawaiians," or anything like it, it would seem to be failing its purpose.

At all events, the issue would appear to be a closed one for the present biennium at least; we have not heard from the people most affected—that is, the lay public—but we *have* heard from the group most likely to be vocal enough for the legislature to hear them, and they want the law retained.

VA-HMSA VETERANS MEDICAL CARE PLAN

A contract has been signed by the Veterans Administration and the Hawaii Medical Service Association for the care of veterans with service-connected disabilities by private physicians on a fee basis.

The contract authorizes the HMSA to arrange for examinations, treatment and counsel in such cases as may be authorized by the Honolulu Regional Office of the VA through their Chief Medical Officer, Dr. M. T. Sax. In most of these cases the veteran will be given his free choice of physician. However, in examinations for disability rating purposes the VA reserves the right to designate the physician. When facilities are available in Federal Hospitals or in the Medical Division of the VA, these must be used by the veterans. Service under this contract is available only to veterans who hold a discharge other than dishonorable.

Forms are available from the VA Regional Office on Oahu and from VA contact representatives on the outside islands to apply for service under this contract. VA Form 2827 is a request from the veteran for out-patient treatment. It should be filled out, signed, and presented to the doctor who will fill out a VA Form 2690. These forms must be filled in completely and mailed to the HMSA—Veterans Division. Except in medical emergencies or where treatment is urgent and delay would be detrimental to the veteran's health, treatment should be started only after authorization is received by the physician. However, in these urgent or emergent cases, treatment may be rendered and the Form 2690 submitted within five days of the commencement of treatment. The veteran should be informed that, if the VA finds him not eligible for treatment, he shall be obliged to pay for the treatment himself. Upon authorization by the VA of treatment requested, HMSA—Veterans Division will send to the doctor a Vet Form 53 which is a simplified combination of several VA forms. It contains space for your authority for treatment, your medical report, a request for authorization for further treatment in the following month, and your bill for services rendered. This must be mailed to the HMSA–Veterans Division not later than the 1st day of the calendar month following the month in which treatment was rendered. If you desire authorization for treatment during the following month and have so indicated in the spaces provided on that form a new form will be sent to you upon authorization by the VA for use during that month. Payment for each month's treatment will be made immediately upon honoring of vouchers by the VA.

Where treatment is concluded during the course of any one month *do not* wait until the 1st of the following month to send in your completed Form 53's. Send them in immediately upon completion of authorized treatments. You will be reimbursed that much faster.

In emergency cases treatment may be rendered and the HMSA–Veterans Division should be notified immediately on VA Form 2690 requesting authorization for such emergency treatment and for any necessary further treatment.

This contract does not cover any hospitalization. Requests for authorization for hospitalization must be made directly to the VA Regional Office in Honolulu.

A Vet Form 52 has been ordered which will combine VA Forms 2827 and 2690 and will eliminate their use. As soon as these forms arrive they will be available to doctors requesting them. Further attempts will be made to simplify the procedure as opportunity presents itself. Government paper work, seemingly complicated, is necessary to thorough bookkeeping, by which we all profit as taxpayers.

This plan is an excellent idea from the veteran's standpoint as well as the physician's. By allowing the veterans a free choice of physicians within the stated limitations it helps to preserve the personal relationship between doctor and patient, the benefit of which, I as a layman, will not attempt to expound to you. The procedure is not as complicated as it sounds on paper. There will be defects in it and I sincerely ask the cooperation of the medical profession in Hawaii to help eliminate these defects and make the plan work.

ROBERT W. MILLAR
Administrator, Veterans' Division, H.M.S.A.

TRANSITORY CHEMICAL SYMPATHECTOMY

Richard H. Lyons and his associates[1] at the University of Michigan Medical School recently reported in a brief preliminary communication on a newly discovered pharmacologic effect, namely, blockade of the autonomic ganglia by the intravenous administration of tetra-ethyl ammonium chloride in doses of from 200 to 500 milligrams. The result of the injection appears to be quite comparable to that of quadrilateral sympathectomy: fall of blood pressure, increase of skin temperature, decreased sweating and salivation, decreased gastrointestinal motility, and so on. The effect lasts for from 5 to 30 minutes with intravenous administration, or from 2 to 8 hours following intramuscular injection.

A further account of the clinical application of this phenomenon was given at the December meeting of the American College of Surgeons, and an article on it will appear in an early issue of *The American Journal of the Medical Sciences.* It appears to be useful in the treatment of causalgia and deep thrombophlebitis of the leg veins, and in the selection of cases of hypertension and thrombo-angiitis obliterans for sympathectomy.

[1] Lyons, R. H., Moe, G. K., Campbell, K. N., Neligh, Rosalie B., Hoobler, S. W., Berry, R. L., and Rennick, Barbara: The Effects of Blockade of the Autonomic Ganglia in Man: Preliminary Observations on the Use of Tetra-Ethyl Ammonium Bromide, Univ. Hosp. Bull., Ann Arbor, 12: 33 (April), 1946.

A.M.A. FELLOWSHIP

The American Medical Association is going to celebrate its centennial in Atlantic City, June 9-13, 1947. Elaborate plans are being made for this celebration.

Only Members, Fellows, and Invited Guests are eligible to attend. Only Fellows may present or discuss papers, or vote in the section meetings.

Membership in your state society is the primary qualification for Fellowship in the A.M.A. Fellowship dues and subscription to THE JOURNAL A.M.A. are both included in one annual payment of $8.00, which is the cost of THE JOURNAL to subscribers who are not Fellows.

If you are not a Fellow and plan to attend the Atlantic City session, which will be a milestone in medical history, you can save yourself a great deal of time and confusion when registering, if you will write now to the American Medical Association, 535 North Dearborn Street, Chicago 10, and ask if you are eligible to become a Fellow.

MEDICAL STAFFS OF LONDON HOSPITALS DISMISSED FOR FAILING TO JOIN UNION

LONDON, Nov. 30 (UP).—Sixty-four doctors and nurses, comprising the entire medical staff of two London hospitals, have been given dismissal notices for refusing to join a trade union as ordered by the Willesden Borough Council, it was disclosed today.

The dismissals become effective December 31. Only the medical superintendent will be left to care for 100 patients at the Willesden maternity hospital if the order is not rescinded.

Dr. F. Anderson, resident medical officer at the maternity hospital, said the council's action constituted "fantastic flouting of personal freedom."

PSYCHIATRIC COMMENT

Bureau of Health Education
American Medical Association
August 30, 1946

Dr. L. A. R. Gaspar, Secretary
Hawaii Territorial Medical Association

Dear Doctor Gaspar:

At the meeting of the House of Delegates of the American Medical Association in San Francisco in July 1946, a resolution was passed urging that the medical profession should give increased leadership and support to research in the fields of mental disease, improved institutional care of the mentally ill and adequately financed mental hygiene programs. A copy of the resolution is enclosed. The follow-through on this resolution has been assigned to the Bureau of Health Education.

It is suggested that state medical societies might begin by creating a committee on mental hygiene, if such a committee does not already exist. Through this committee contacts might be made with the state department which is responsible for the care of mental patients, working toward a study of conditions and proposals for improvement, including legislation providing for additional personnel, where needed, and the utilization of all modern humane means for the adequate care of the mentally ill.

Contact might also be made through such a committee with mental hygiene organizations affiliated with the National Committee for Mental Hygiene, 1790 Broadway, New York 19, and for the encouragement and broadening of programs by such societies. Where such societies do not exist, the medical society committee, in conjunction with interested lay groups, might sponsor their establishment. The state committee might also seek to further the appointment of local committees and establish local mental hygiene organizations.

There is at this time great public interest in the care of the mentally ill. Many persons believe that conditions in mental hospitals are bad, and there is some evidence in support of such belief. The medical profession can do a great good by taking leadership in this field and seeking to improve the care of the mentally ill, and to further measures intended to safeguard those who are not mentally ill against possible breakdown.

Editorial comment in your state medical journal is suggested as a first step. Publication of the resolution is advised, plus such portions of this letter as you deem advisable.

Very truly yours,

W. W. Bauer, M.D.

October 28, 1946

Dr. W. W. Bauer
Bureau of Health Education
American Medical Association
535 North Dearborn Street
Chicago 10, Illinois

Dear Dr. Bauer:

Your letter of August 30, 1946, to Dr. L. A. R. Gaspar, Jr., Secretary, Hawaii Territorial Medical Association, has been referred to me for reply. This letter dealt with a resolution of the House of Delegates urging the medical profession to give increased leadership and support to research in the field of mental disease, improved institutional care of the mentally ill, and adequately financed mental hygiene programs. In your letter, it was suggested that the state medical societies might create a mental hygiene society and work toward improved care of mental patients, and better legislation, etc.

You would be interested in knowing, I am sure, that in 1937 Dr. Franklin G. Ebaugh, Professor of Psychiatry at the University of Colorado and Chairman of the Committee on Psychiatry in Medical Education of the American Psychiatric Association, was employed by the Chamber of Commerce of Honolulu through its Public Health Committee to conduct a mental health survey of the Territory. This resulted in a formulation of six cardinal recommendations which are to be found in the enclosed copy of Dr. Ebaugh's report. This has been published in the *American Journal of Psychiatry*. Volume 95, No. 4, January, 1939.

At the time of Dr. Ebaugh's visit to Hawaii, the Hawaii Territorial Medical Association, then under the presidency of Dr. Thomas Keay, appointed

(Please turn to next page)

a committee on psychiatry and neurology. I have had the honor of being a member of that committee under the chairmanship of Dr. Robert B. Faus from its inception in 1937. Since 1941, I have been chairman of the same.

This committee has systematically attempted to follow up the recommendations made by Dr. Ebaugh. There has been some reorganization of the Territorial Hospital; there has been recodification of the laws on mental health; the Mental Hygiene Society of the Territory of Hawaii has been organized largely through our efforts; there have been established a Territorial Psychiatric Clinic and a psychiatric department in The Queen's Hospital (which is a general hospital); there has been an attempt to educate the professional public through lectures and papers as noted in the tear sheets enclosed herewith; there has been some education of the lay public through the Mental Hygiene Society, and also the Bureau of Mental Hygiene of the Board of Health.

We have been in touch with the National Committee for Mental Hygiene in regard to many issues. The undersigned has also served as Territorial Representative, Committee on Public Education, American Psychiatric Association, under Dr. C. C. Burlingame, since state representatives were appointed in 1942. The Territorial Council on Veterans' Affairs, now a governmental agency, is a direct outgrowth of our work here—at the instigation of Dr. Burlingame and the National Committee for Mental Hygiene.

From the above, it will be seen that from a mental health point of view, we in Hawaii are active.

As a sequel to the tear sheets and the reports enclosed herewith, there have just been completed a series of ten bills to be submitted at the Legislature which will convene in February, 1947. These are as follows: (1) An act to amend Chapter 233 of the Revised Laws of Hawaii 1945 relating to the disposition of mentally irresponsible persons indicted for, or acquitted of, crime; (2) An act to define criminal sexual psychopathic persons and to provide for the commitment of such persons and the procedure therefor; (3) An act to provide for police matrons in certain cities of the Territory of Hawaii, to define their powers and duties, and to provide for designating station houses or departments thereof, for the detention of women and children under arrest in said cities; (4) An act to amend Chapter 196 of the Revised Laws of Hawaii 1945 relating to evidence, by inserting a new section to be designated section 9840.01 relating to physicians testifying as to psychiatry; (5) An act to amend Chapter 47 of the Revised Laws of Hawaii 1945 relating to the Territorial Hospital, by inserting a new section to be designated section 2552.01 relating to the conveyance of medically indigent persons to the Bureau of Mental Hygiene; (6) An act to amend Section 2552 Session Laws of Hawaii 1945 as amended to provide for the establishment of a child guidance clinic; (7) An act empowering the court to appoint expert witnesses in civil and criminal proceedings, providing for conferences and joint reports of expert witnesses, and the compensation of expert witnesses, and to make uniform the law with reference thereto, and repealing all laws inconsistent therewith; (8) An act to amend Section 4021 of the Revised Laws of Hawaii 1945 by setting up standards of conditions, management and competence to care for persons suffering from mental disorders to be met by county detention wards; (9) An act to amend Chapter 69 of the Revised Laws of Hawaii 1945, as amended, relating to the care, treatment, commitment, hospitalization, transfer and discharge of persons who are mentally ill, feeble-minded, or habituated to the excessive use of drugs or liquor; and (10) An act to amend Chapter 305 of the Revised Laws of Hawaii 1945 as amended by S.B. No. 293, Sections 12504, 12507-12511, 12516, 12523, 12529, 12530, 12533, and 12548, regarding the appointing of guardians for small estates of mentally handicapped persons.

The above have been worked out by the Committee on Psychiatry and Neurology of the Hawaii Territorial Medical Association in collaboration with the Mental Hygiene Society, the Honolulu Council of Social Agencies, the Department of Institutions, the Attorney General's Office, and the Public Health Committee of the Chamber of Commerce of Honolulu. It is believed that these stand a fair chance of becoming law. The attached clipping from the *Honolulu Advertiser* for October 20, 1946, indicates present activity along these lines.

If you possess any information or have any material which you think might be of interest to us, we shall be glad to have it.

Very truly yours,

R. D. KEPNER, M.D., *Chairman*
Committee on Psychiatry and Neurology
Hawaii Territorial Medical Association

THE HONOLULU COUNTY MEDICAL LIBRARY

Mrs. Ethel Hill, *Librarian*

Mrs. Gladys Ohms, *Library Assistant*

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(Monday through Friday)
(closed Saturdays at noon and Sundays)

Library closed all day on national holidays; after 12 noon on Territorial holidays

RECENT ACQUISITIONS

By purchase:

Luck, J. M., ed. *Annual review of biochemistry. v. 16.* 1946.

Luck, J. M., ed. *Annual review of physiology. v. 8.* 1946.

U. S. War Dept. Surgeon General *Index catalogue of the Library of the Surgeon General's Office, U. S. Army. 1st series, vols. 1-3, 6-8.* 1880-1887.

U. S. War Dept. Surgeon General *Index catalogue of the Library of the Surgeon General's Office, U. S. Army. 2nd series, v. 9.* 1904.

From the Tuberculosis Association:

Banyai, A. L. *Pneumoperitoneum treatment.* c1946.

Chadwick, H. D. *The modern attack on tuberculosis.* c1942.

Drinker, C. K. *Pulmonary edema and inflammation.* c1945.

Girdlestone, G. R. *Tuberculosis of bone and joint.* 1940.

Keers, R. Y. *Pulmonary tuberculosis.* 1945.

Lindberg, D. O. N. *A manual of pulmonary tuberculosis and an atlas of thoracic roentgenology.* c1943.

Longhurst, G. M. *Tuberculosis nursing.* c1944.

Mayer, Edgar, ed. *Radiation and climatic therapy of chronic pulmonary diseases.* c1944.

Moorman, L. J. *Tuberculosis and genius.* c1940.

Muller, G. L. *Clinical significance of the blood in tuberculosis.* c1943.

Myers, J. A. *Man's greatest victory over tuberculosis.* c1940.

Packard, E. N., ed. *Artificial pneumothorax.* 1940.

Pattison, H. A. *Rehabilitation of the tuberculous.* c1942.

Pinner, Max. *Pulmonary tuberculosis in the adult.* c1945.

Puffer, R. R. *Familial susceptibility to tuberculosis.* c1944.

Rafferty, T. N. *Artificial pneumothorax in pulmonary tuberculosis.* c1944.

Stone, M. J. *The diagnosis and treatment of pulmonary tuberculosis.* c1946.

Sweany, H. C. *Age morphology of primary tubercles.* c1941.

Trudeau, E. L. *An autobiography.* c1915.

Wilmer, H. A. *Huber the tuber.* c1943.

From the Hospital Association:

American Hospital Association *American Hospital Directory, 1946.*

From the University of Illinois:

Bucy, P. C., ed. *The precentral motor cortex.* c1944. (Illinois monographs in the medical sciences, v. 4, nos. 1-4.)

From Dr. A. L. Craig:

Bick, E. M. *History and source book of orthopaedic surgery.* c1933.

Kurtz, C. M. *Orthodiascopy.* c1937.

Painter, C. F., ed. *Yearbook of industrial and orthopedic surgery, 1940-1942.*

Raney, R. B. *A primer on the prevention of deformity in childhood.* c1941.

Woodward, W. C., ed. *Medicolegal cases: abstracts of court decisions of medicolegal interest, 1931-35.*

From Dr. L. A. R. Gaspar, Jr.:

Beaunis, H. *Nouveaux elements d'anatomie descriptive et d'embryologie.* 1885.

From the Alsup Clinic:

Barjon, F. *Radio-diagnosis of pleuro-pulmonary affections.* c1918.

From the publisher:

Fleming, Sir Alexander. *Penicillin: its practical application.* c1946.

* * *

The Library has selected a list of publishers of medical books and the Hawaii Medical Journal editors have written requesting copies of their new publications for review in the Journal. As these books arrive, they will be turned over for review to members of the Medical Society selected by the Journal Editor. The Editor will also be glad to receive the names of any doctors who may be interested in reviewing. These reviews will appear in the near future in a separate book review section, and doctors should watch for this column, since the books will appear on the Library shelves soon

thereafter. In some cases a complimentary copy of the review volume will be available for the reviewer to keep.

The Library is most grateful for these gifts from the publishers as they will not only aid immeasurably in keeping our book collection current, but will also help us in securing material which we might otherwise be unable to purchase from our limited budget.

NEW JOURNAL SUBSCRIPTIONS

American Journal of Anatomy
American Journal of Hygiene
American Journal of Medical Technology
American Journal of Medicine
American Journal of Physiology
Anesthesiology
Brain
British Journal of Ophthalmology
British Journal of Pharmacology and Chemotherapy
British Journal of Surgery
British Journal of Tuberculosis
British Journal of Urology
Calcutta Medical Journal
Canadian Hospital
Cancer Research
Chemical Reviews
Chinese Medical Journal
Clinical Science Incorporating Heart
Diseases of the Chest
Edinburgh Medical Journal
The Hospital (British)
Hospital Management
Hospital Progress
Indian Journal of Medical Research
Indian Medical Gazette
Journal of American Pharmaceutical Association
Journal of Anatomy
Journal of Aviation Medicine
Journal of Biological Chemistry
Journal of Endocrinology
Journal of General Physiology
Journal of Gerontology
Journal of Immunology
Journal of Mental Science
Journal of Neurosurgery
Journal of Physiology
Journal of Thoracic Surgery
Physiological Reviews
Quarterly Review of Biology
Yale Journal of Biology and Medicine

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

At a special meeting held on December 13, 1946 the Hawaii County Medical Society approved and voted to support the plan of the Honolulu County Medical Economics Committee as outlined in letters from the Honolulu Society and reported by Dr. L. L. Sexton, Councillor of the Territorial Medical Association.

HONOLULU COUNTY MEDICAL SOCIETY

A special meeting of the Honolulu County Medical Society was held in the Mabel Smyth Auditorium on November 8, 1946. The meeting was called by the President, in accordance with the by-laws, to discuss the organization plan proposed by the Medical Economics Committee. Sixty-two members were present; also Mrs. Bolles and Mr. Kleber Miller. Dr. Bowles presided.

The chairman explained that this matter was first brought up by a few actively interested members of the Society who felt the Society should take definite steps toward solving the medical economic problems of the profession in Honolulu. The President appointed Dr. F. J. Pinkerton (Chairman), Dr. Gotshalk and Dr. Palma as a committee to draw up a plan. Dr. Izumi has been appointed to replace Dr. Palma temporarily, while the latter is on the mainland. The plan was thoroughly discussed and approved at the last meeting of the Board of Governors.

Dr. Pinkerton, chairman of the Medical Economics Committee, presented the reasons why the Medical Society needs expert advice and assistance in the field of medical economics. Frequently in recent years plans for medical care have been made by outsiders and then presented to the doctors. The Medical Society has not been ready with the necessary facts and figures, or time and experience, either to draw up plans of its own or to make wise decisions on the merits and the shortcomings of plans presented to it. A medical emergency exists in the Territory as to the kind of practice doctors are to be allowed to conduct. A few doctors have spent great amounts of time and effort working out fee schedules for the crippled children, the veterans, the H. M. S. A. and the workmen's compensation. A small group developed a medical care plan for the pineapple workers. Now medical perquisites on the sugar plantations are outdated and the medical profession must present a practical plan to the Hawaiian Sugar Planters' Association. The system of medical care for indigents must be revised. All these problems and many others require thorough study by someone who is qualified and interested, and who has the time to devote to such tasks. These are a few of the most important reasons why the Medical Society needs a competent individual or individuals who can find facts and present them. With the next session of the Legislature approaching and several bills not in our best interests to be presented, we believe this is the time to set up our plan so we can have the answers.

Dr. Homer Izumi, chairman of the Public Relations Committee, described the need to improve our public relations, a field in which the profession has been very remiss. This committee has outlined a public relations program and has made an effort to find a person properly qualified to carry out such a program. Support of the reorganization plan, including public relations, was strongly urged.

Dr. Gotshalk presented figures on the financial situation of the Medical Society. From the estimated annual income and expense of the Society, he showed it to be obvious that any new money to finance such a program must come from an assessment on each individual member. The budget prepared by the Medical Economics Committee was $18,000 for a year. That would mean a special assessment of $75 per member, said Dr. Gotshalk.

Considerable discussion followed and everyone who wished to present his opinion had an opportunity.

Dr. Nance asked whether this plan should not be a Territorial one rather than a County one. Our problems are the same as the rest of the Islands. Any benefit would be shared by the doctors on the other Islands. Why should not everyone who will benefit share in the cost? Dr. Pinkerton replied that that was quite correct and had been considered by the Committee. They realized it would take time to incorporate the other Societies and felt it was so important that Honolulu should go ahead with the plan. Later a recommendation would be made to the other County Societies to share in the plan and in its costs.

Dr. Kepner asked for a breakdown of costs and Dr. Gotshalk read the proposed budget as circulated to the membership:

Executive Vice-President	$7,200.00
Public Relations Director	4,800.00
Medical Secretary	3,600.00
Office Expenses, Stationery, Material and Supplies	2,400.00
	$18,000.00

Finally it was moved by Dr. Stewart, seconded by Dr. Fennel, and passed that the Honolulu County Medical Society adopt the plan recommended by the Medical Economics Committee, provided that it should be recommended to the Hawaii Territorial Medical Association as a territorial project rather than a County Society plan. Only three doctors went on record in opposition to the motion.

* * *

The December meeting of the Honolulu County Medical Society was held in the Mabel Smyth Building on Friday, December 6, at 7 p. m. Dr. Bowles presided. There were 52 members and guests present.

A movie on ovulation was shown through the courtesy of Muller and Phipps.

Three new members were welcomed into the Society: Dr. A. Leslie Vasconcellos, Dr. Ralph S. Steffe (by transfer from Washtenaw County, Michigan), and Dr. Wayne Wong (by transfer from Cook County, Illinois).

It was announced that the Medical Economics Committee was proceeding with plans for the new organization. Mr. Jay Ketchum, of the Michigan Medical Plan, had been invited by H.M.S.A. to visit Hawaii early in January. The Medical Economics Committee has asked him to survey our situation while he is here. The Board of Governors felt it advisable to make no commitments before receiving his recommendations.

The doctors were again reminded that any member of the Society is always welcome to attend meetings of the Board of Governors. The date and time may be ascertained by calling Mrs. Bennett.

The Board of Governors approved of the addition of two items to the Veterans' Fee Schedule: consultation in office $7.50, in hospital or home $10.00; consultation with a recognized specialist in office $10.00, in hospital or home $15.00.

Mr. Rhea had reported to the Board of Governors that when the hospitals open their outpatient clinics, Palama plans to close its medical department. Instead it plans to operate a clinic entirely in the educational field. There would be no medical service at all. Cases requiring diagnosis or treatment would be referred to clinics or to private physicians. The plans have been approved by the Board of Health, the Council of Social Agencies, etc. The Board of Governors also approved in principle of Palama's plan for health education.

The chairman also announced that an additional $5,000 had been appropriated to the Library, to be used especially for five-year subscriptions to the important medical journals. This was considered a good investment for the money received for hospital care of indigents.

A symposium on eye, ear, nose and throat was presented, consisting of the following papers: *Medical ophthalmology* by Dr. F. J. Pinkerton and Dr. O. D. Pinkerton, *Tonsillectomy* by Dr. C. W. Trexler, *Hoarseness* by Dr. L. Q. Pang, *Sinusitis* by Dr. Tadao Hata, and *Diseases of middle and external ear* by Dr. E. R. Austin.

Following the scientific session, refreshments were served on the lanai.

S. L. Yee, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was held at the Wilcox Memorial Hospital on October 8, 1946 at 7 p.m. Members present were Drs. Wade, Wallis, Liu, Fujii, Depp, Toney, Cockett, Brennecke and Masunaga. Dr. Young was also present as a guest. Minutes of the last meeting were read and approved.

Dr. Wade invited the physicians to use streptomycin in necessary cases, since supplies of this drug are released through Waimea Hospital.

Dr. Wallis made a motion, seconded and passed, to endorse the general principle of the future medical plan as outlined and presented to the Health and Sanitation Committee by the Plantation Physicians of Oahu. A letter was to be written to Dr. Liljestrand informing him of the favorable action of this Society.

* * *

Kauai County Medical Society met at 7:15 p.m. on November 13, 1946 at the Wilcox Memorial Hospital. Members present were Drs. Wade, Depp, Liu, Cockett, Toney, Boyden, Wallis, Kuhns, Brennecke, Fujii, Chisholm and Masunaga. Dr. Hewell and Dr. Hatt were also present as guests. Minutes of the last meeting were read and approved.

Dr. Wade and Dr. Cockett gave some of the highlights of the medical plan discussed at the meeting of the Plantation Physicians.

The proposed organization plan of the Honolulu County Medical Society Medical Economics Committee was read for consideration. No action was taken for its approval.

The meeting was turned over to Dr. Hatt of the Shriners' Hospital. His impressions of the development and improvement of public health and medical practice in Hawaii in the past ten years were a great delight.

* * *

At a regular meeting of the Kauai County Medical Society held December 11, 1946, Dr. Burt O. Wade presented to the members the newly created plan of the Medical Economics Committee of the Honolulu County Medical Society. All the members were in favor of this program and unanimously voted to make financial contributions to carry out the plan.

EICHI MASUNAGA, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

The regular meeting of the Maui County Medical Society was held on Wednesday, December 18, 1946, at the Nanikai Club. Drs. Sanders, Dunn, Dusendschon, Anderson, St. Sure, Rothrock, Izumi, Hedbloom, Beland, Underwood, Von Asch, Kanda, and Balfour were present.

Dr. Sanders gave a report of a special meeting of the Honolulu County Board of Governors regarding the plan proposed by the Medical Economics Committee. He explained the advantages of having such a plan in operation in the Territory of Hawaii. He stated that the Honolulu County Medical Society was going ahead with this plan and had asked the outside islands to adopt the plan also to make it a success. After a thorough discussion, a motion was made by Dr. Dunn that the Maui County Medical Society heartily commend the Honolulu Medical Society for its active inauguration of a medical economics program, and that the Maui Medical Society support financially and morally any medical economics program for the good of all Hawaii Medical Societies. It was recommended that any program of medical economics heretofore sponsored by the Honolulu Medical Society be promoted in the future as a function and part of the Territorial Medical Association. This motion was seconded and unanimously passed.

Dr. F. B. Schultz gave an interesting talk on the subject: *The treatment of emergencies in cases of heart disease.*

W. D. BALFOUR, M.D.
Secretary

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NOTES AND NEWS

Dr. Clarence E. Fronk, of Honolulu, has returned from his safari in Africa and reports in glowing terms his experiences there. On his return he addressed a meeting of the Western Surgical Society, in Memphis, Tennessee, on diseases peculiar to the natives of East Africa.

Dr. Charlotte Louise Meller, of Honolulu, became the bride of Mr. Charles E. Biddle, formerly of Harrison, Ohio, on November 30 at Central Union Church. Governor Ingram M. Stainback gave the bride in marriage. She will return to her practice of psychiatry following the wedding trip.

Dr. John W. Devereux, of Honolulu, has been named by Governor Stainback as a member of the Territorial Board of Licensing of Nurses, replacing Dr. James L. Morgan, who recently resigned.

Dr. and Mrs. William John Holmes, of Honolulu, are the proud parents of a girl, their second child, born at Queen's Hospital on November 22. Dr. Holmes has recently opened the Valley House Hotel, on Kauai, which was the former Spalding home. The hotel will be operated as a resort and should prove popular with both tourists and islanders desiring a vacation on the Garden Isle.

Dr. and Mrs. Mon Fah Chung returned in December from a four months' vacation on the mainland, during which they visited old friends in Boston and saw their daughter, who is a student at Wellesley.

Dr. Paul O. Wiig, formerly of Honolulu and now practicing in Reno, Nevada, was recently honored by election to Fellowship in the International College of Surgeons, and was initiated at their meeting in Detroit. As Nevada State Chairman of the American Cancer Society, he attended its national meeting in New Orleans. Dr. Wiig sends his aloha to his numerous friends in the Islands.

Dr. F. J. Pinkerton served as general chairman of the very successful 1946 Shrine Aloha Bowl football game. Dr. Pinkerton has been most active in Shrine affairs for many years, being a Past Potentate of Aloha Temple.

Dr. R. J. McArthur, of Wailuku, Maui, has recently sold his office and equipment and returned to his former home in Portland, Oregon. He will be associated with his brother, Robert L. McArthur, in the Studio Building. His many friends wish him much success in his new location.

Dr. Frank S. Lee, of Wailuku, Maui, has moved to Honolulu, where he plans to open his office for general practice.

Dr. and Mrs. Donald S. Depp, of Koloa, Kauai, have announced the birth of their first child, Charles Donald, born on December 2. Dr. Depp is with the Koloa Sugar Co.

Dr. Thomas Y. K. Chang, of Honolulu, sent Christmas greetings from Christmas Island, where he is stationed as Lieutenant, U. S. Army Medical Corps. Dr. Chang was Resident in Pathology at The Queen's Hospital before entering the service.

Dr. Webb Boyden, of Koloa, Kauai, has returned after three months post-graduate study in the east. Dr. Boyden specializes in eye, ear, nose and throat diseases.

Dr. Burt O. Wade and Dr. Patrick M. Cockett, of Lihue, Kauai, were representatives to the annual Plantation Physicians' meeting in Honolulu.

Recent visitors to Kauai were Drs. R. B. Cloward and Nelson Hatt, of Honolulu, acting as neurosurgical and orthopedic consultants respectively for the Territorial Board of Health.

As an avocation from their medical work, Drs. Marvin Brennecke, David Liu and James Young, of Kauai, have become student pilots and are quite enthusiastic in learning the art of aviation.

Dr. Louis Buzaid, radiologist to The Queen's Hospital, has returned from attending the meeting of the American Radiological Society in Chicago. He also visited in Philadelphia.

Dr. Teruo Yoshina, of Hilo, has successfully completed the examinations of the American Board of Pediatrics and has been certified as a specialist in pediatrics, the first physician on the Big Isle to be so certified.

Dr. Ralph B. Cloward, of Honolulu, recently attended the annual meeting of the Harvey Cushing Society of neurosurgeons, in Boston, where he showed a movie on Hawaii and was instrumental in the Society's selection of Honolulu as their meeting place in August, 1948, in conjunction with the Pan Pacific Surgical Conference. He also attended the meeting of the International College of Surgeons, in Detroit, and visited neurosurgical clinics in New York, Atlanta and Chicago. He reports that his father, Dr. Ralph E. Cloward, formerly of Honolulu and now retired in Los Angeles, is in good health, and has recently turned author.

Dr. Ray G. Nebelung, executive secretary of the Public Health Committee of the Honolulu Chamber of Commerce, has returned from attendance at mainland meetings of various public health organizations, a number of which he addressed.

The Secretary of War, through the Surgeon General, has appointed the following Hawaii physicians as consultants in their respective fields: Dr. Richard D. Kepner, psychiatry; Dr. Steele F. Stewart, orthopedic surgery, and Dr. Ralph B. Cloward, neurosurgery. Further appointments in other fields are being considered.

Dr. Edward F. Cushnie, of Honolulu, is now located in the Young Building, in association with Drs. Henry S. Dickson and Edwin K. Chung-Hoon. Prior to this he was associated with The Clinic.

Dr. S. C. Culpepper has returned to Honolulu after spending six months away. During this trip he visited Alaska as well as numerous cities on the mainland.

Dr. Robert G. Johnston, of Honolulu, is spending three months visiting surgical centers in St. Louis and the East.

Dr. James Marnie, former interne at The Queen's Hospital, made a quick air trip over the Christmas holidays to his home in the Islands. Dr. Marnie is stationed at Brooke General Hospital, San Antonio, Texas, as a Lieutenant, U. S. Army Medical Reserve Corps.

Dr. William M. Walsh has returned from a visit to his former home in St. Louis.

A photographic exhibit on leprosy prepared by Drs. I. L. Tilden and Harry L. Arnold, Jr., and shown at the meeting of the American Academy of Dermatology and Syphilology in Cleveland last December, was awarded second prize among the scientific exhibits shown.

Dr. Thomas W. Cowan of Kahului, Maui, Dr. Harold M. Patterson of Olaa, Hawaii, and Dr. Steele F. Stewart of Honolulu, Oahu, were received into fellowship in the American College of Surgeons at the Convocation held December 20 during the Clinical Congress in Cleveland.

Dr. Evelyn Ross has finished her residency in surgery at The Queen's Hospital and is now plantation physician for Libby, McNeill and Libby at Maunaloa, Molokai.

HEALTH DEPARTMENT NEWS

Three health department executives returned from the mainland recently after completing tours of mainland health departments and attending medical conventions.

Dr. Charles L. Wilbar, Jr., president of the Board of Health, returning from the 45th annual conference of state and territorial health officers, stated that discussion emphasis was placed on the problems caused by the shortage of trained public health personnel. He also commented that one whole day of the conference was given over to discussion of the Federal Hospital Survey and Construction Act.

Also returning were Dr. Samuel D. Allison, newly appointed director of the bureau of preventive medicine, and Dr. James R. Enright, director of the bureau of communicable diseases. Dr. Allison visited the state health departments in California, Oregon and Indiana to study their preventive medicine programs. He also attended the venereal disease conference in Memphis, and the American Public Health conference in Cleveland. Dr. Enright joined him at the American Public Health Association convention and was elected a Fellow in the Association.

One hundred thousand people to be x-rayed in twenty weeks is the goal set for the city-wide tuberculosis survey to begin on January 20, according to the x-ray survey management committee, composed of local physicians and representatives of the Tuberculosis Association, the health department, and community organizations. The health department will have the use of two mobile x-ray units for the survey. The survey will begin in the downtown area, move into industrial areas and then into the residential areas.

"COURAGE AND DEVOTION BEYOND THE CALL OF DUTY"

Through the cooperation of Mead Johnson & Company $34,000 in War Bonds are being offered to physician-artists (both in civilian and in military service) for art works best illustrating the above title, as applied to physicians in war and in peace.

This contest is open to members of the American Physicians Art Association and will be judged June 9-13, 1947 at the Atlantic City Session of the American Medical Association. For full details, write Dr. F. H. Redewill, Secretary, Flood Building, San Francisco, Calif., or Mead Johnson & Co., Evansville 21, Indiana.

UROLOGY AWARD

The American Urological Association offers an annual award "not to exceed $500" for an essay (or essays) on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to residents in urology in recognized hospitals.

For full particulars write the Secretary, Dr. Thomas D. Moore, 899 Madison Avenue, Memphis, Tennessee. Essays must be in his hands before May 1, 1947.

The selected essay (or essays) will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Hotel Statler, Buffalo, New York, June 30-July 3, 1947.

LITERATURE ON PENICILLIN

The first of a series of concise, ready-reference booklets, entitled "Penicillin Paragraphs," has been mailed to all active physicians in the United States by Schenley Laboratories, Inc., to help disseminate significant clinical experience in the use of this wartime-developed medicine.

A new edition will be issued each month, with each booklet devoted to clinical material bearing on the treatment of a specific disease. The initial issue of "Penicillin Paragraphs" deals with use of penicillin in pneumonia. By filing each issue, physicians can build an indexed file of compact, authoritative reports on a wide list of diseases amenable to penicillin therapy.

BOOK REVIEWS

Narcotics and Drug Addiction. By Erich Hesse. Translated from the German by Frank Gaynor. New York. Philosophical Library. 1946. 219 pp. $3.75.

The following description of the book is quoted from the cover: "This is a complete and up-to-date handbook, describing the uses and abuses, in the Eastern and Western world, of all the pleasure drugs and stimulants. The author is an M. D., a professor of pharmacology and biology. He gives in this volume the latest available authentic information on this important subject. He describes in simple, non-technical, but scientific language the nature and character of all the pleasure drugs of our times. The common components, the manner and method of manufacture and production, are clearly defined, as well as the various stages of drug addiction, their effect and their cure. Alcoholic psychoses, cocaine consumption, opium smoking, exhilarating pepper, morphinism are just a few of the many topics covered by Professor Hesse. An appendix contains names and subject index and an extensive bibliography."

In addition to the above, the author includes a great deal of historical material, and cites statistics to show the world-wide use of such drugs. He goes into considerable detail concerning the chemical composition, pharmacological action, and modes of use of many of them, even including the kava-kava of the South Seas. He urges a strenuous fight against their use by education and widespread knowledge of their nature and harmfulness, not just by legislation alone.

Comparatively little is said, however, that might be helpful to the average physician in his diagnosis or treatment of persons habituated or addicted to these drugs. Also, the accuracy of some of the material is open to question, as, for example, the classification of alcohol as one of the chief "stimulant" drugs, the designation of delirium tremens as an "emotional hallucinosis," the ascribing of cirrhosis of the liver to a "liver toxin," etc.

On the whole, however, the book covers the stated subject matter in a way that should prove interesting as well as educational to the non-professional person. It is not likely to be of much practical help to the average practicing physician.

R. D. KEPNER, M.D.

The Illinois Cancer Bulletin. A. C. Ivy, Ph.D., Editor; Committee on Cancer of the Illinois State Medical Society, Vol. 1, Nos. 1-12, April-September, 1946.

This Bulletin is written, as the masthead of its first issue declares, "in the interest of the earlier recognition of cancer." It is published semi-monthly by the Illinois State Medical Society, 30 North Michigan Avenue, Chicago 2, Illinois. It is available for re-issue in any locality, under the name of that locality, at cost. It would be hard to invest money more profitably in post-graduate training.

It consists of instructive articles on cancer in general and specific cancers in particular, which are at once clear and elementary, and detailed. The material seems to be directed primarily to graduate physicians, but medical students and intelligent laymen would find most of it quite intelligible, so lucid is the style. The format is attractive, and tends to encourage the reader rather than bore him. Illustrations, many of them in color, are plentiful and clear. Charts are used to clarify many points which might otherwise be lost in a maze of columns of figures.—H. L. A. Jr.

* * *

CALLING ATTENTION TO
Items of possible interest to friends of Chauncey D. Leake

November, 1946

1. More books: R. J. Williams proposes new applied science, humanics, for comprehensive study of individual humans, in his *Human Frontier* (Harcourt Brace, N. Y., '46, 314 pp., $3). E. A. Steinhaus helps in understanding of insect transmission of disease in his well prepared *Insect Microbiology* (Comstock, Ithaca, N. Y., '46, 763 pp., $7.75). Physiologist W. A. Osborne collects his pleasant *Melbourne Argus* sketches and others in his *Essays and Studies* (Lothian Publ. Co., Melbourne, 1946, 195 pp., 10s 6d). J. R. Porter offers much in his *Bacterial Chemistry and Physiology* (Wiley, N. Y., '46, $12). Important for tissue culturists are A. Fischer's *Essays* (Copenhagen, or Stechert, N. Y., '46, 357 pp., 31s 6d). Among interesting *Monographs on the Progress of Research in Holland During the War* are H. Veldstra & Co.'s *Modern Development of Chemotherapy.* B. C. P. Jansen's *Nutrition Researches,* S. E. de Jongh's *Gonadotropic and Sex Hormones,* M. W. Woerdeman's *Experimental Embryology,* A. T. Knoppers' *Pharmacological Investigations,* and N. Waterman's *Modern Cancerology* (Elsevier Publ. Co., Amsterdam and N. Y., '46, about 200 pp.). Sir A. Fleming well edits *Penicillin: Its Practical Application* (Blakiston, Phila., '46, 380 pp., $7). M. R. Everett's *Medical Biochemistry* goes into well merited 2nd edition (Hoeber, N. Y., '46, 767 pp., $7). O. Saphir's *Autopsy Diagnosis and Technic* also comes to 2nd edition (Hoeber, N. Y., '46, 427 pp., $5). S. Licht lilts on *Music in Medicine* (New England Conservatory, Boston, '46, 152 pp., $3). C. E. Benda discusses *Mongolism and Cretinism* (Grune & Stratton, N. Y., '46, 325 pp., $6.50). M. Davis flies high in *Through the Stratosphere: The Human Factor in Aviation* (Macmillan, N. Y., '46, 271 pp., $2.75). P. F. Russell & Co. offer *Practical Malariology* (Saunders, Phila., 705 pp., $8).

2. Symposia: A notable discussion on lymph (*Ann. N. Y. Acad. Sci.* 46: 679, '46) includes R. Chambers and B. W. Zweifach on activity of blood capillary bed, E. M. Landis on capillary permeability, E. R. Clark on intracellular substance and tissue growth, P. D. McMaster on skin factors in lymph flow, V. Menkin on lymph blockade in immunity, C. K. Drinker on extravascular protein, W. E. Ehrich on the lymphocyte in lymph flow, and A. White and T. F. Dougherty on lymphocytes in globulin production. Discussion on aviation physiology (*Fed. Proc.* 5: 318) includes A. C. Ivy on high altitude problems, E. H. Wood & Co. on effects of acceleration in aviation, A. C. Burton on clothing and heat exchanges, H. K. Hartline on visual physiology, and M. I. Gregerson on shock. E. L. Tatum introduces discussion on neurospora as a biochemical tool (*Ibid* 361). E. A. Evans, E. G. Ball, L. Hellerman, W. B. Wendel & Co. discourse on biochemistry of malarial parasite (*Ibid* 390). Physiology in North America is interestingly surveyed by E. F. Adolph, P. Dow, T. E. Boyd, and J. H. Comroe (*Ibid* 407). Appropriate for the ether centennial is British tribute, with E. A. Underwood reviewing history, C. L. Hewer recent advances, J. H. Burns theories of anesthesia, A. C. King apparatus, and G. Liddle poetry (*Brit. Med. J.* 2: 525, Oct. 12, '46).

3. And also: F. H. Johnson and I. Lewin report quinine effects on dehydrogenases, temperature and pressure effects in disinfection and on growth rates of microbes *J. Cell. Comp. Physiol.* 28: 1, 23, 47, 77, '46). R. Andrew's article on dysenteries (*Med. J. Australia* 2: 289, Aug. 31, '46) might well be booked, but section on amebiasis might well be revised. Relax: R. H. Follis finds no biological effects from high frequency radio waves (*Am. J. Physiol.* 147: 281, '46). J. E. Davis produces hyperchromic anemia by acetylcholine and finds folic acid or liver extract increase choline-esterase action (*Ibid.* p. 404). M. Dixon and D. M. Needham concisely review British biochemical research on chemical warfare agents (*Nature* 158: 432, Sept. 28, '46). M. F. Lockett isolates vasopressor base from dogs with renal ischemia, which seems to be same as base liberated by alkaline hydrolysis of healthy urine (*J. Physiol.* 105: 117, 126, 138, '46). M. F. Murnaghan describes digitalis-like heart action and antidiuretic effect of penicillic acid (*J. Pharmacol. Exper. Therap.* 88: 119, '46). A. M. Ambrose and F. DeEds report on parasympathetic stimulant action of antibiotic citronin (*Ibid,* p. 173). J. P. Duguid describes weakening of cell wall by penicillin (*Edin Med. J.* 53: 401, '46). E. R. Trethewie describes anticoagulant effect of spleen (*Austral. and New Zealand J. Surg.* 15: 286, '46). W. Munch reviews pathological anatomy of acute cardiac syncope (*Acta Path. Microbiol. Scan.* 23: 107, '46). M. Delbruck reviews bacterial viruses or bacteriophages (*Biol. Rev. Cambridge Phil. Soc.* 21: 30, '46). E. L. Way finds that barbitals antagonize lethal convulsive effects of isonipicaine (demoral) but potentiate its depressant effect on respiration (*J. Pharmacol. Exp. Therap.* 87: 265, '46). J. Stokes finds infectious hepatitis virus transmitted by fecal contamination (*Trans. Stud. Coll. Phys. Phila.* 14: 37, '46). Our W. B. Sharp, M. B. John and J. M.

Robison discuss etiology of otomycosis (*Texas St. J. Med.* 42: 380, '46).

* * *

End of 1946

1. ANTIBIOTICS: V. du Vigneaud & Co. synthesize penicillin by condensing a benzyl oxazolone with penicillamine, giving basis for synthesis of many types of penicillins (*Science,* 104: 431, Nov. 8, '46). R. Brodersen and A. Kjaer report antibacterial action, low toxicity, and inactivation by S. H. of such unsaturated lactones as dicoumarol (*Acta Pharmacol. Toxicol.* 2: 109, '46). B. Kromann reports oil-in-water emulsion of 250 units (Florey) penicillin per Gm cream is optimal for local application to infected wounds (*Ibid,* p. 185). N. Atkinson finds antibacterial activity, even against acid fast types, in watery extracts of mushroom fungi as Psalliota xanthoderma and Cortinarius rotundisporus (*Austral. J. Exp. Biol. Med.* 24: 169, '46).

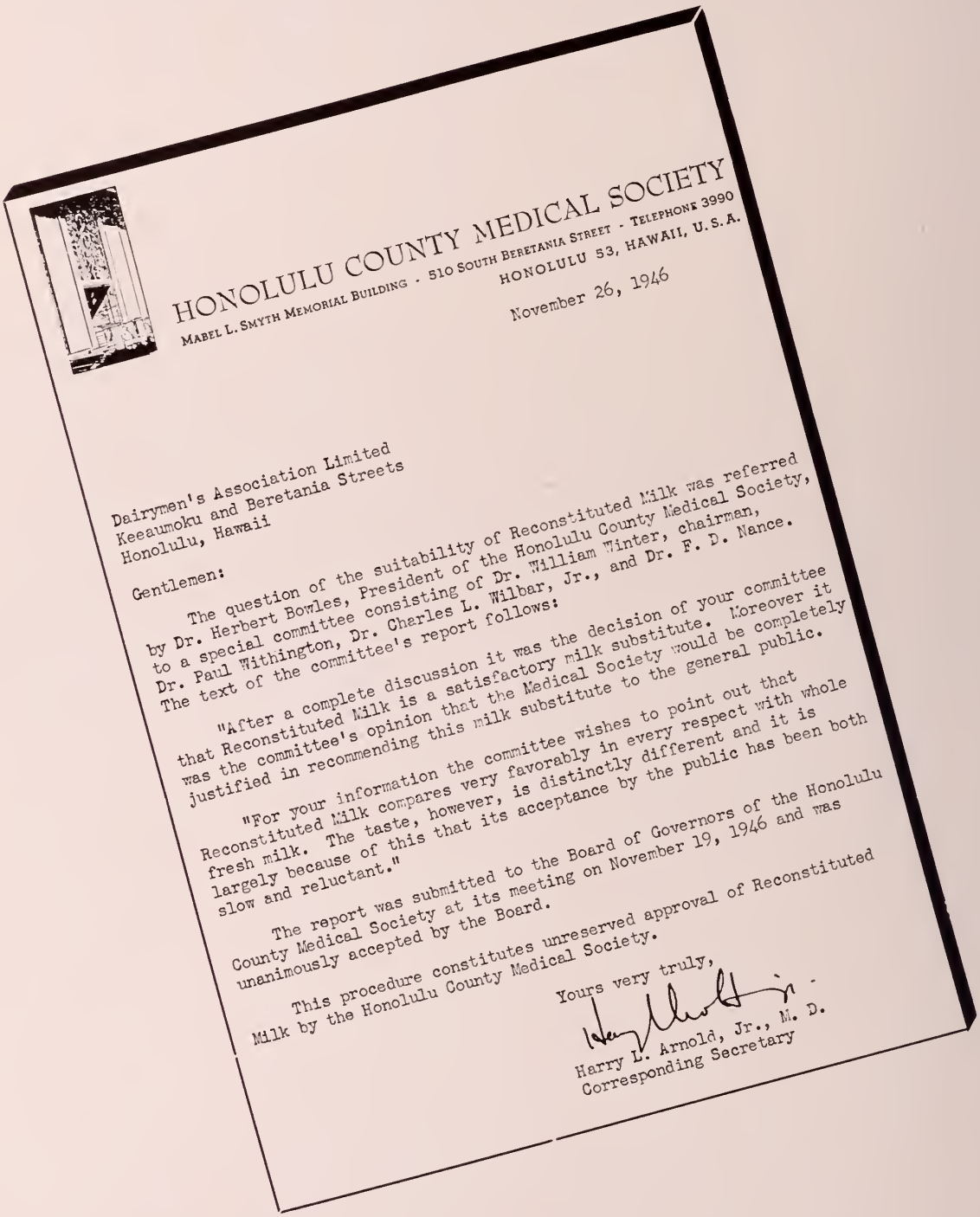
2. ANESTHESIA CENTENNIAL: Important contributions are: H. H. Young, Crawford W. Long (*Bull. Hist. Med.* 12: 191, '42); H. R. Raper, Long Centennial Celebrations (*Ibid* 13: 340, '43); W. H. Archer, Horace Wells Life and Letters (*J. Am. Coll. Dentists* 11: 81, '44); Horace Wells, Centenary (*Conn. S. Med. J.* 8: 725, '44); T. E. Keys, History of Surgical Anesthesia (Schuman, N. Y., '45); H. R. Raper, Men Against Pain (Prentice-Hall, N. Y., '45); E. S. Ellis, Ancient Anodynes (Heinemann, London, '46); V. Robinson, Victory Over Pain (Schuman, N. Y., '46); J. F. Fulton and M. E. Stanton, The Centennial of Surgical Anesthesia (Schuman, N. Y., '46); Anesthesia Centennial Number (*J. Hist. Med. Allied Sci.* 1: 505, '46); Centenary of Anesthesia Number (*Brit. Med. Bull.* 4: 81, '46); Anesthesia Number (*Brit. Med. J.* (2): 525, Oct. 12, '46); Anesthesia Number (*Irish J. Med. Sci.* 6 ser., #250,644, '46); B. M. Duncan, Development of Inhalation Anesthesia (Oxford Univ. Press, for Wellcome Historical Medical Museum, London, '46). More next year!

3. BLOOD: A. Lambrecht & Co. find more than 500 basophiles per million erythrocytes needed to justify diagnosis of lead poisoning (*Acta Clin. Belgica.* 1: 224, '46). M. Ostro and D. I. Macht report improvement in hemophilia from spleen radiation (*South Med. J.* 39: 860, '46). D. F. Cappell offers helpful clinical review on Rh blood group (*Brit. Med. J.* 2: 601, 641, Oct. 26, Nov. 2, '46). A. S. Wiener and P. Levine discuss Rh factor (*Am. J. Clin. Path.* 16: 477, 597, '46).

4. NOBELATION: H. J. Muller, while at Texas, for gene mutation with X-ray (*Genetics* 13: 279, '28; with T. S. Painter, *Am. Naturalist* 63: 193, '29, also 481); J. B. Sumner at Cornell for isolating and crystallizing enzyme urease (*J. Biol. Chem.* 69: 435, '26); J. H. Northrop at Rockefeller Princeton for isolating and crystallizing pepsin and trypsin, and work on bacteriophage (*J. Gen. Physiol.* 13: 739, '30, 16: 267, '32; *Physiol. Rev.* 17: 144, '37; *J. Gen. Physiol.* 21: 335, '38, and W. M. Stanley for isolating and crystallizing viruses (*Science* 81: 644, '35; *Ergebn. Physiol.* 39: 294, '37 and *Bull. N. Y. Acad. Med.* 14: 398, '38).

5. WORTHY: J. Erlanger and G. M. Schoepfle study nerve degeneration and regeneration (*Am. J. Physiol.* 147: 550, '46). E. W. Page, our E. Ogden and E. Anderson find cortical steroids restore renal hypertension in hypophysectomized rats while testosterone and estradiol are lethal (*Ibid* 471). J. P. Greenstein & Co. report nucleic acid metabolism and degradation (*J. Nat. Cancer Inst.* 7: 9, 29, '46). J. Drummond is provocative in his theory of intracellular energy production and its practical applications in cardio-vascular conditions (*S. African Med. J.* 20: 596, '46). R. Straus & Co. confirm Russian claims that antireticular cytotoxic serum speeds healing of fractures (*J. Immunol.* 54: 151, '46). L. E. A. Wright and V. M. Trikojus explain action of iodine in Graves's disease by finding it inactivates thyreotropic hormone (*Med. J. Austral.* 2: 541, Oct. 19, '46). U. Savonheimo reviews clinical actinomycosis (*Ann. Med. Int. Fenniae* 35: 74, '46). C. de Duve and J. P. Boucharet propose general theory of insulin action (*Arch. Internat. Pharmaco.* 72: 62, '46). J. E. Davis and D. E. Fletcher report hyperchromic anemia and nervous system changes caused by daily giving of choline (*J. Pharmacol. Exp. Therap.* 88: 246, '46). O. Krayer & Co. find helpful cardiac effects from alkanolamines (*Ibid* 277). W. Raab and R. J. Humphreys say dibenzylchlorethylamine protects heart against fatal dose of epinephrin (*Ibid* 268). A. G. H. Bjurstedt studies chemoreflex and centrogenic control of breathing during oxygen deficiency (*Acta Physiol. Scand.* 12: Suppl. 38, '46). H. Fischer makes fundamental study of cellular respiration effects of alkaloids (*Arch. Exp. Path. Pharmacol.* 200: 455, 43; *Helv. Physiol. Pharmacol. Acta* 4: 423, '46). G. V. Pillmore offers useful *Clinical Radiology* (Davis, Phila., 2 vols., 850 and 708 pp., '46, $4.50). Vol. 21 *Acta Psych. Neurol.* is dedicated to Hjalmar Helwig on his 60th birthday, '46. J. W. Grott & Co. (Warsaw) find high oxalic and uric acid levels in patients with musculo-articular pain (*Acta Med. Scand.* 125: 576, '46). H. Heusser discusses traumatic aspects of operative procedures (*Helv. Chir. Acta* 13: 167, '46). Our A. O. Singleton and J. C. Kennedy recommend physiological principles in surgery (*Texas S. J. Med.* 42: 411, '46).

Dairymen's Association, Ltd., takes pride in the approval of their Reconstituted Milk by the Honolulu County Medical Society:



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November 26, 1946

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Gentlemen:

The question of the suitability of Reconstituted Milk was referred by Dr. Herbert Bowles, President of the Honolulu County Medical Society, to a special committee consisting of Dr. William Winter, chairman, Dr. Paul Withington, Dr. Charles L. Wilbar, Jr., and Dr. F. D. Nance. The text of the committee's report follows:

"After a complete discussion it was the decision of your committee that Reconstituted Milk is a satisfactory milk substitute. Moreover it was the committee's opinion that the Medical Society would be completely justified in recommending this milk substitute to the general public.

"For your information the committee wishes to point out that Reconstituted Milk compares very favorably in every respect with whole fresh milk. The taste, however, is distinctly different and it is largely because of this that its acceptance by the public has been both slow and reluctant."

The report was submitted to the Board of Governors of the Honolulu County Medical Society at its meeting on November 19, 1946 and was unanimously accepted by the Board.

This procedure constitutes unreserved approval of Reconstituted Milk by the Honolulu County Medical Society.

Yours very truly,

Harry L. Arnold, Jr., M. D.
Corresponding Secretary

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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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HIGHLIGHTS OF THE BIENNIAL CONVENTION OF THE AMERICAN NURSES' ASSOCIATION

JOSEPHINE HALL AND MURIEL HUGHES*

The 50th Anniversary meeting of the American Nurses' Association was called to order by President Katharine J. Densford on Monday, September 23, 1946.

In her opening address Miss Densford paid tribute to the nurses who had served so faithfully during the war for Army, Navy and civilians. She pointed out that although the war is over, peace has not been restored and the upheaval that war has brought to all countries and occupations has not spared the nursing profession. Although the United States has one-half of all the professional nurses of the world and many other countries are faced with far worse health hazards than our own, our newspapers are full of the subject of nurse shortages. What, then, is the reason for this?

Annual surveys by the American Medical Association have shown that hospital admissions rose from 10,000,000 in 1944 to 15,000,000 in 1945; and the daily average hospital census more than doubled from 305,000 to 665,105. This increase can be accounted for in large measure by growth of population, increase in family incomes, spread of the Blue Cross hospital insurance, overcrowding in the homes, overburdening of physicians and increase of birth rate. Also, there is a growing demand by the public for the best medical and hospital care they can get. In other words, the demand for nursing service has skyrocketed and the supply cannot be increased at the same rate of speed. Recent estimates made by the Committee on Statistical Research of the National Nursing Council give a probable deficit of 41,700 nurses. Miss Densford stated: "We do not know when supply can catch up with demand—if ever. This vast expectation of the public for the best of nursing service challenges us to meet it as soundly and wisely and rapidly as we can."

The proposed platform presented to the House of Delegates for consideration was adopted and contains the following major objectives that will have a far reaching effect upon the nursing profession:

1. Improvement in hours and living conditions for nurses so that they may live a normal personal and professional life.

2. Specifically, action toward (a) wider acceptance of the 40-hour week with no decrease of salary, thus applying to our post-war conditions the principle of the 8-hour day adopted by the American Nurses' Association in 1934; (b) minimum salaries adequate to attract and hold nurses of quality, and to enable them to maintain standards of living comparable with other professions.

3. Increased participation by nurses in actual planning and administration of nursing service, in hospitals and other types of employment.

4. Greater development of nurses' professional associations as exclusive spokesmen for nurses in all questions affecting their employment and economic security. Such a development should be based on past successful experience of professional nurses' organizations in collective bargaining and negotiations.

5. Removal as rapidly as possible of barriers that prevent the full employment and professional development of nurses belonging to minority racial groups.

6. Employment of well-qualified practical nurses and other auxiliary workers under state licensure, thus protecting both the patient and the worker.

7. Continuing improvement in the placement and counseling of nurses, to give greater stability and job satisfaction to the profession and to facilitate a better distribution of nursing service to the public.

8. Further development of nursing in prepayment health and medical care plans in order to spread the cost of nursing service to the public.

9. Maintenance of educational standards and development of educational resources that nursing may keep abreast of the rapid advances in medicine and other sciences. Such a development may well require federal subsidies and contributions from foundations and other educational philanthropies.

10. Appraisal of our own national organizations through the report of the Structure Study and fearless

* Two of the Delegates from Hawaii.

action based upon such appraisal, to make sure that the nursing profession will be organized and equipped to deal most effectively with its problems and its opportunities.

On Wednesday, September 25, 1946, a joint meeting was held in commemoration of the 50th Anniversary of the ANA and a representative of each state was asked to appear on the platform. Delegate Senator Thelma Akana was representative for Hawaii.

It was impossible to attend all of the meetings but we covered as many as we could. We wish to extend our sincere thanks to the Nurses' Association, Territory of Hawaii, for the privilege and honor of representing Hawaii at this eventful and history-making convention.

* * *

THE NEW NURSE PRACTICE ACT AS IT AFFECTS NURSING CARE IN THE HOSPITALS

Josephine Valentine*

The nurse practice act of 1945 gave the Board for Licensing of Nurses larger responsibilities than before in relation to the licensing and education of nurses. This law, in line with the general trend of nursing legislation throughout the country, makes licensure compulsory for all persons who nurse for hire and provides two types of license, the registered or professional nurse license and the practical nurse license. It also states that only graduates of approved schools may be admitted to the licensing examinations and therefore gives the Board definite responsibility for accrediting and supervising both professional and practical nursing schools in the Territory. This implies the establishment of standards for nursing education on both levels and continued supervision of all nursing schools by means of periodic visitations to the schools by a representative of the Board and by periodic reports submitted by the schools.

An initial survey of the existing schools for professional nurses in the Territory is being conducted at the present time, by the writer, it being deemed advisable that such work be done by a nurse neither previously nor presently connected with any of the schools. A report of each survey will be prepared, reviewed and edited by the Board and sent to the individual institution concerned. It can be said at this time that in general the writer considers the local schools comparable to mainland nursing schools and sees no justification for the opinion that graduates of mainland schools are per se superior to the nurses being currently educated here. Nursing schools on the mainland have wide variation and there are undoubtedly many there which are not as good schools as these in Honolulu.

Before the passage of the 1945 act, licensure of registered nurses was permissive only, the law merely protecting the use of the title. Practical nursing was not controlled in any way and was wide open to all and sundry without credentials or qualifications. The new law defines nursing in terms of function and states clearly that: "In order to safeguard life and health, no person shall practice or offer to practice nursing in the Territory of Hawaii for compensation unless licensed or excepted from licensing under this chapter." The purpose of this, of course, is that eventually everyone practicing nursing will have been trained to nurse on one or the other level and will hold a legal credential which is evidence of a certain minimum preparation. Thus the public will be in large measure protected from practice by the unfit, and hospitals employing nursing aides, attendants, orderlies, etc. will be able to get men and women for such duties who have had a known course in nursing. The amount of training-on-the-job that hospitals now have to give this group can thus be eliminated.

This implies the necessity for the establishment of schools of practical nursing and the Board now has a committee at work setting up standards for such schools. It is hoped that at least one approved school of practical nursing can be started by September, 1947. The course will probably be nine months in length which means that actual production of trained practical nurses will probably not begin before the first of June, 1948.

In order that hospital service may not be disrupted and also that persons already established in these positions may not be deprived of their means of earning a living, it is the intention of the Board to license the majority of those now so employed without further training and without examination. Because it will not be possible to graduate nurses from approved practical nursing schools before the middle of 1948, applications on the basis of satisfactory practice and the necessary recommendations will continue to be considered from persons newly employed in such capacity up to within six months of that date. After July 1, 1948, however, no more applications will be received for license without examination. Thereafter anyone applying for a practical nurse license will be informed that the way to procure a license is to satisfactorily complete the course in an approved school for practical nurses and pass the licensing examination.

* Read before the seventh anniversary meeting of the Hospital Association of Hawaii, December 5, 1946.

No one will be admitted to the licensing examination who has not completed such a course or a course considered by the Board to be its equivalent.

The members of the Board feel very keenly the responsibility of licensing these individuals without specified training. In fact, in their early thinking on the subject they were inclined to be very cautious and that was why three years of nursing practice was specified and endorsement by four persons was asked. When the applications began to come in it became apparent that with a three-year experience requirement, it was not going to be possible to license enough persons to enable the hospitals to function in the interval which must elapse before approved practical nursing schools can be established. After careful consideration of the problem the conclusion was reached that a shorter practice period should be accepted. It was realized that in licensing these people now nursing the sick, new nurses are not being created; the individuals already so engaged are merely being labeled. The long range purpose of the law is better nursing care in our hospitals and throughout the community and if we disrupt hospital service in our attempt to achieve that, we are doing the community a dis-service. The Board's fear, and doubtless that of some of the hospital officials and doctors asked to recommend them for licensing, has been that with such a credential in hand they would leave the hospitals for private practice, where, working without the supervision of registered nurses, they would not be safe practitioners. The answer to this fear, it is believed, is that the total number who may qualify in this way is not alarmingly large and probably the great majority of them will prefer to continue in the hospital jobs they are in. A very few may on acquisition of a license try private duty, but that is a comparatively small risk to take for the sake of making the law eventually effective.

The Board now urges that hospital officials recommend for license every one of their ward workers to whom they are now entrusting nursing care duties and who have had a total of six months of such practice in their institutions or elsewhere. The assumption is that if they are not fit for such work they will not have been employed in it for as much as six months but will have been dismissed or assigned to non-nursing duties entirely.

It may be of interest that as of December 31, 1945 a total of twenty states, including the Territory of Hawaii, had passed legislation providing for the licensing of a second group in nursing practice. The American Nurses' Association has endorsed such legislation as well as the principle of requiring all who nurse for hire to be licensed. Members of the nursing profession believe these measures are essential in the interest of safe nursing care of the sick, and hope their friends in hospital administration and in the medical profession will help in interpreting this purpose and in making it effective.

UNREST AND SELF-RESPECT*

Carl Flath, F.A.C.H.A.

It seems to me that the tumultuous state of affairs which exists today has affected not only the personnel situation itself, but, even more significant, our point of view in dealing with the problem.

We seem bewildered. Our perplexity, and the necessity during the war for dealing with problems hurriedly, have tended to add to the confusion. Our efforts in solving the problems have in many instances been superficial and spasmodic. As a result, discouragement is added to the confusion.

Perhaps if we can view the problem generally, we may discover certain fundamental values which have been overlooked in the turmoil. With a refreshed view, we may be able to establish a firm foundation on which to move forward with greater confidence and effectiveness.

Unrest

There is a great deal of *unrest.* Everybody is in a period of change and re-evaluation. Let us look first at the hospital administrator who has been relatively satisfied with his job for a number of years. The war reduced the quality of care in his institution; criticisms which he had never heard before poured in; the auxiliary and volunteer workers felt they could run the hospital much better; and the trustees grew uneasy.

Now that the war is over, those trustees may have decided they have done their part and new trustees should take over. The new trustees may decide that what they need is a new administration. Or, the administrator who carried on during the war may have grown weary and unrestful, and now he may be looking for a new opportunity.

What is true on that level is equally true on other levels. We must not overlook the fact that a great many employees remained with their jobs rather steadily during the war, often accepting conditions and adjustments not to their liking because

* The seventh anniversary meeting of the Hospital Association of Hawaii was held in Honolulu December 5 and 6, 1946. During this session papers of general interest to nurses were presented and we have been granted permission to print a number of them in the Bulletin. These will appear from time to time. We are very pleased to present at this time the thought provoking paper given by Mr. Carl Flath, Administrator of Queen's Hospital.

they felt it was their patriotic duty. Now that the war is over, they are experiencing a period of unrest. They no longer are held by a sense of duty, and they are looking for a change.

Requisites for Self-Respect

During this period of unrest, then, it seems to me that everybody is groping for what he considers to be his place of *self-respect*. What is that position of self-respect? Undoubtedly, ideas on what constitutes self-respect will vary with each individual. But it seems to me there are several essential qualities which must, of necessity, be satisfied.

The employee wants to feel self-confident. How many times during the war have we heard an administrator speak of employees' shortcomings which, he said emphatically, he would not tolerate when the war was over? So now the administrator begins to emphasize the weaknesses and shortcomings of his employees, at a time when the employees are groping for their self-respect—seeking assurances of their strength rather than reminders of their weakness.

The employee wants self-government. The employee wants self-government in the sense that he wants to feel his opinions or suggestions will be received with respect, regardless of his position. He wants to feel that he will have a part in changes that are considered. He wants to feel that during times when there may be disagreement, there will be available to him an effective means whereby a disagreement can be adjusted with fairness and proper consideration.

The employee needs to feel that he is wanted—that he belongs. It seems to me that we fail, at times, in our organizations, to impart to the employee the feeling that he's part of the group. He wants to feel that he belongs—and more than that, he wants to be certain that we feel he belongs. So he is looking for evidence from us that he is accepted as a part of the group. Our means of furnishing this evidence will differ, but that point is not important. If the evidence is lacking, then the employee feels that he does not belong, and he is unrestful.

All of these things I think make up the search for self-respect in employment, whether it be in a mill, a factory, a bank, a department store or a hospital.

Will we be able to hold our present employees and attract others? Let's base our consideration of this question on two premises:

First, the market for hospital workers, at all levels, is an extremely competitive market.

Second, to meet this competition, we must be very realistic about what we have to offer.

Could we perhaps see ourselves as others see us by asking ourselves:

Why Should Anybody Want to Work in a Hospital Anyway?

Sometimes we can't understand why a nurse would prefer to work in a doctor's office instead of on one of our wards, or why a bookkeeper would rather work in a bank than in our hospital —and so on. Let's analyze this thing.

Military discipline still exists in our hospitals. When I first entered the hospital field, I recall my embarrassment when the nurses stood at attention. This custom is a result of military discipline, but it doesn't exist in industry, or in a bank. So if a person doesn't like military discipline or attitude, he just doesn't like to work in a hospital where it exists.

Our management is paternalistic. In some instances, we say where the employee is to live, what hours she is allowed to be away, when she should be home in the evenings, and we even suggest that she shouldn't be away too many week-ends. We decide what she will eat, and in some instances, what she will wear. The paternalistic, or maternalistic, attitude becomes irritating after a while, and the employee may seek employment where she enjoys more freedom of choice about those things.

Then we give our employees certain services. Maybe from their point of view, the services we give aren't a gift but a burden. Maybe they would prefer to be paid in cash and have the privilege, as others do, of selecting their living quarters, their food, and even their health care. They might enjoy, in case of illness, going to another hospital instead of ours, or selecting the room of their preference in our hospital as any other patient might. Whether they prefer to be hospitalized in another hospital or not, they might have a higher appreciation of our hospital if they knew they could go elsewhere if they chose.

When I was a cub superintendent, I was convinced by the superintendent of nurses that, more than anything else, the student nurses needed a tennis court. When I explained the need to one of our donors, he gave us a thousand dollars, we built a tennis court, and in three months it was covered with grass. Well, maybe the superintendent of nurses *thought* the student nurses needed a

tennis court, but apparently the student nurses didn't think so. *And I learned the lesson that people tend to place a higher value on things they work for than on things which are given to them.*

Often we have untrained supervisors in our hospitals. If there is anything that irritates personnel in the lower levels, it is supervision by a person who is officious, who is not well trained, or who does not understand the policies of the institution. One of our greatest weaknesses in personnel management, I believe, is inadequate training of supervisors, and failure to inform them what our policies are.

The hours are undesirable. It is necessary that some of our employees work at night, on Sundays, and on holidays. But most undesirable of all is the split shift. I wouldn't like to go to work early in the morning, have a few hours off and return to work until late in the evening. Maybe you'd like it—but I wouldn't.

The salaries are unattractive oftentimes. Plus the other undesirable conditions we have reviewed, we sometimes expect our employees to work at less salary than they could earn elsewhere. Of course, we explain that we'd like to pay more, but it just isn't possible. Well, the trouble is that other places feel they can afford to pay, and therefore they tend to attract our workers.

What Can We Do About It?

The only conclusion we can draw from this analysis is that we have some adjustments to make, if we are to hold our present employees and attract others. What should these adjustments be?

Salary is not the greatest appeal. We have salary adjustments to make—there's no question about it. But employees are more concerned about a great many other phases of our employment than they are about salary.

The attitude of management. The employees are looking for attitude of management more than anything else. They want us and our board of trustees to define, as clearly as possible, exactly what our personnel policies are. Today the employee is coming forth to ask: "Just what are your personnel policies?"

If there is anything we could do to clear our own mind on this question and to convince the employee in the reverse order, it is to sit down and reduce to writing exactly what our personnel policies are, and when we have done that, submit those policies to our supervisors and ask their reaction. You'll be surprised to learn that there will be a wide range of opinions differing from the policies we may have drawn up.

Therefore, it is important in the creation of policies that we have the respect engendered by conference with supervisors. I think one of the weaknesses of management at times in hospitals, is that we neglect to talk our ideas over with departmental supervisors, and this weakness is apparent particularly in personnel management. Until we confer with our supervisors, I think we will have failed to impart to them the attitude we have and the attitude they want from us.

If employees know that management—and by management I mean not only the top boss, but the head nurse, the supervisors and the department heads as well—is concerned about their reactions, and that changes will be discussed with them in advance, they will like their employment and will tend to have confidence in the management.

Definiteness in program. After we have formulated policies, we must demonstrate that we really mean to carry them out.

If we say we have a salary schedule, that increases will be made at certain intervals depending upon merit, and that the individual we don't raise will be told why—AND WE DON'T DO IT—then, all the time spent developing the program is wasted. They will have no confidence in us.

Or if, under pressure from one source or another, we raise one person's salary out of line with the schedule, we may be sure that, in spite of our suggestion: "Now, you just keep this to yourself," the other employees will know about it—and soon, too. Here again, confidence is lost.

On the other hand, if we demonstrate over a period of time that we really mean what we say, if it should be necessary to explain to them that financial circumstances prevent our making an increase as we would like to do at some particular time, the chances are they will want to stay and may even resist a higher salary elsewhere. Why? Because we have proved consistently that we mean what we say, and they like to work for us.

Unrest and self-respect are closely related. To the extent that we increase self-respect among our people, we decrease unrest.

* * *

INTERNATIONAL COUNCIL OF NURSES ANNOUNCES QUADRENNIAL CONGRESS

The Quadrennial Congress of the ICN will be held in Atlantic City, N. J., May 11 to May 16, 1947, inclusive. This will be the first meeting since 1937.

Previous to the Congress in Atlantic City, the Board of Directors and the Grand Council of the ICN will meet in Washington, D. C., May 4 to May 10, 1947. The Board of Directors will meet May 5 and 6. This will be purely a business meeting. Each member country is entitled to send the president of the national association to that meeting. The President, Treasurer, Executive-Secretary and Chairmen of all committees will make their reports at this meeting. Resolutions from national organizations should be placed on the agenda and, after the approval of the Board of Directors, will be transmitted to the Grand Council for adoption.

The Grand Council will meet May 7, 8, 9. At this meeting, the election of international officers will take place—one president, three vice-presidents and a treasurer. Reports from the Board of Directors will be presented. General policies and work for the next quadrennial period will be outlined. All national organizations will be asked to present reports on their activities, which should be at the headquarters of ICN, 1819 Broadway, New York 23, N. Y., not later than January 1, 1947, as they must be translated and printed to be at the disposal of the delegates.

The Grand Council consists of international officers, national presidents and four official delegates from each member country and one delegate from associated national representatives. On May 10, all official delegates will leave Washington, D. C., for Atlantic City, N. J.

The Quadrennial Congress will take place in Atlantic City, starting Sunday, May 11, and will be opened by two church services, one Catholic, one Protestant. The rest of Sunday will be used for registration. The Congress will begin with a general meeting on Monday, May 12. More details will be available at a later date from the American Nurses' Association, which is hostess to the International Congress.

On Saturday, May 17, the new Board of Directors, presided over by the newly elected president, will have its first meeting.

The Swedish Nurses' Association has sent an invitation to the International Council of Nurses to hold its next meeting (following the Congress in 1947) in Stockholm.

All registered nurses are cordially invited to attend the meetings of the International Congress. Identification cards as registered nurses* will be the only documents necessary to register for the Congress and to participate in all the activities. The number of registered nurses will not be limited. Student nurses are also invited but their number must be limited to one representative from each school of nursing. In addition to student nurses who will be welcomed as special guests, a certain number of other special guests are invited, such as doctors, those in allied professions and those especially interested in the nursing profession.

Registered nurses residing in Hawaii who plan to attend this Congress should correspond with Anna Schwarzenberg, Executive Secretary, 1819 Broadway, New York 23, for additional information.

* Or proof of membership in a national organization.

HONOLULU CITY AND COUNTY NURSES' ASSOCIATION

Industrial Nurses Section

At the last meeting of the Industrial Nurses Section, Dr. M. Sax and Mr. T. P. O'Connor of the Veterans' Administration were guest speakers on the subject of medical and financial benefits available for all veterans. After the lectures both speakers held a round table discussion with the members present which proved most satisfactory and informative.

The following newly elected officers for 1947 have been installed:

President—Dorothy Rish.
Vice President—Virginia Ahrendt.
Secretary-Treasurer—Pearl Kaiser.
Corresponding Secretary—Lula Johnson.
Program Committee—Margo McDermid, Julia Lombard.
Entertainment Committee—Mabel Cabonau, Myrtle Payne, Helen Hatchell.

KAUAI NURSES' ASSOCIATION

Ellen Olson, R.N.*

The Kauai Nurses' Association resumed monthly meetings this fall with a round table discussion of the Ideal Home for the Aged and Chronically Ill. The discussion defined a problem to each of us that must be confronted and solved soon. Continued indifference to the growing needs of our chronically ill and aged population will demand sharp attention and efforts in the near future.

In 1940 one out of every fourteen persons was either 65 years of age or over. At the present rate of increase there will be eighteen million people 65 and over in another 35 years, as compared with ten million at the present time.

On Kauai alone, according to a survey made by the Department of Public Welfare in 1945, we

* Editor for the Kauai Nurses' Association.

have 235 persons who could be possible applicants for care in a home for the aged and chronically ill. Chronic illness results in unemployment. Only 33 per cent of our aged group is self-supporting. Most of our chronically ill are aged and without support.

In speaking of our aged group we do not refer to men alone. In fact, women seem to survive the longest. Therefore, we must remember to make accommodations for all.

Our ideal home should be pleasant, comfortable, well lighted and ventilated. We must keep in mind the type of disabilities that are common among our chronic ill and aged. Thus, ramps will be used in place of steps; bathroom facilities need to be well placed; rooms and wards should be planned to maintain privacy and individuality as completely as possible.

The staff should include workers whose outstanding characteristics are patience, kindliness and understanding of human nature. It would be advisable to have a registered nurse in charge. If a dietitian is not employed, the nutrition worker of the island or community could be consulted.

The objectives of the home would be to provide nursing care for those who need it; to maintain good general health for the patients; to bring happiness and a feeling of usefulness and security to those living there. The aged or chronically ill individual may easily feel unwanted. Plans should include occupational therapy to keep minds and hands busy. All effort must be put forth to develop a sense of responsibility and a feeling of contribution.

Nurses have the opportunity to realize these conditions more fully than most people. As a group we can do much in assisting the community to accept this responsibility and to aid in planning homes that all will be proud to acknowledge.

The American Legion of Kauai is preparing plans for such a home on this Island. The Kauai Nurses' Association would welcome the opportunity to assist in the setting up of such an institution.

* * *

PUBLIC HEALTH NEWS

Five new public health nurses who received their public health nursing certificates from the local university joined the nursing staff of the Board of Health in November.

Chitose Araki, Katherine Ajifu, Shigeko Izumo, and Kazue Kimura are graduates of Queen's Hospital school of nursing and Kimie Tamashiro received her nurse's training from St. Francis Hospital. Alavana Chang, who also finished her public health nursing work at the local university, will join the nursing staff in December.

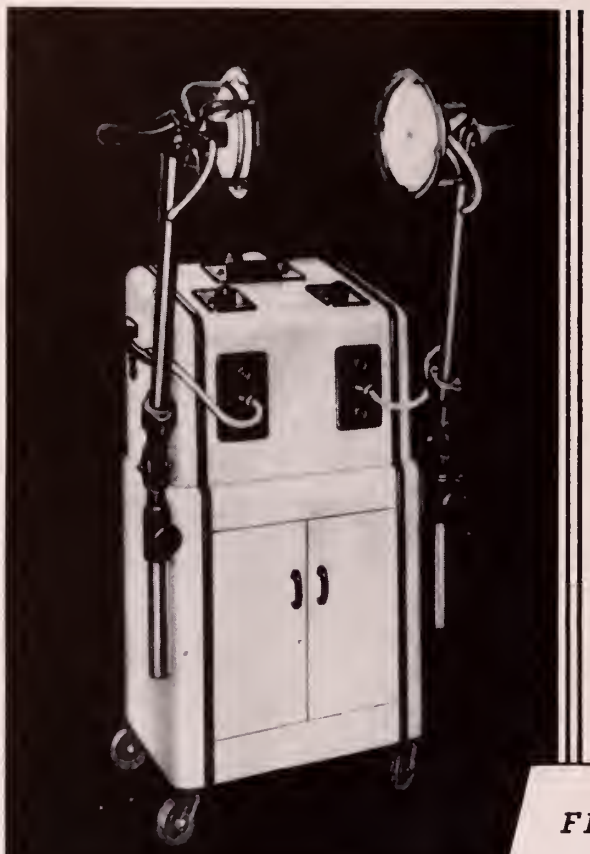
Miss Araki and Miss Izumo have been assigned to Hawaii county, Miss Ajifu to rural Oahu, Miss Kimura to Kapahulu health center, and Miss Tamashiro to Lanakila health center.

Miss Chang will work on Maui.

Miss Janice Mickey, assistant director and education director of the bureau of public health nursing of the board of health, left the Territory on November 2 to accept a position as assistant professor of public health nursing at the school of public health of the University of Minnesota.

Miss Elizabeth Marks, former supervisor of public health nursing at Kapahulu health center, resigned her position with the health department and left for the mainland for an extended rest.

Miss Marks had been with the nursing staff of the health department for the past fifteen years.



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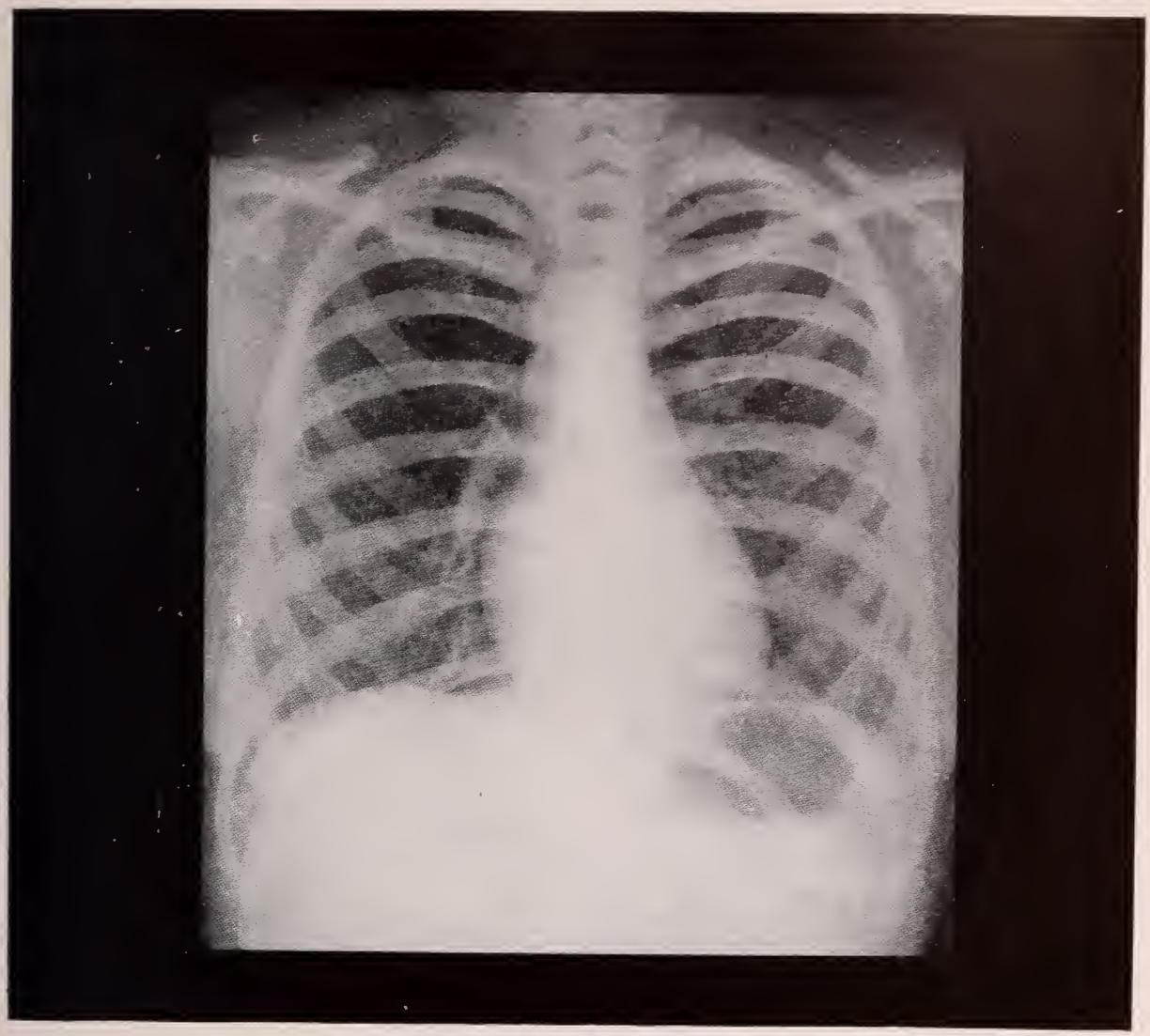
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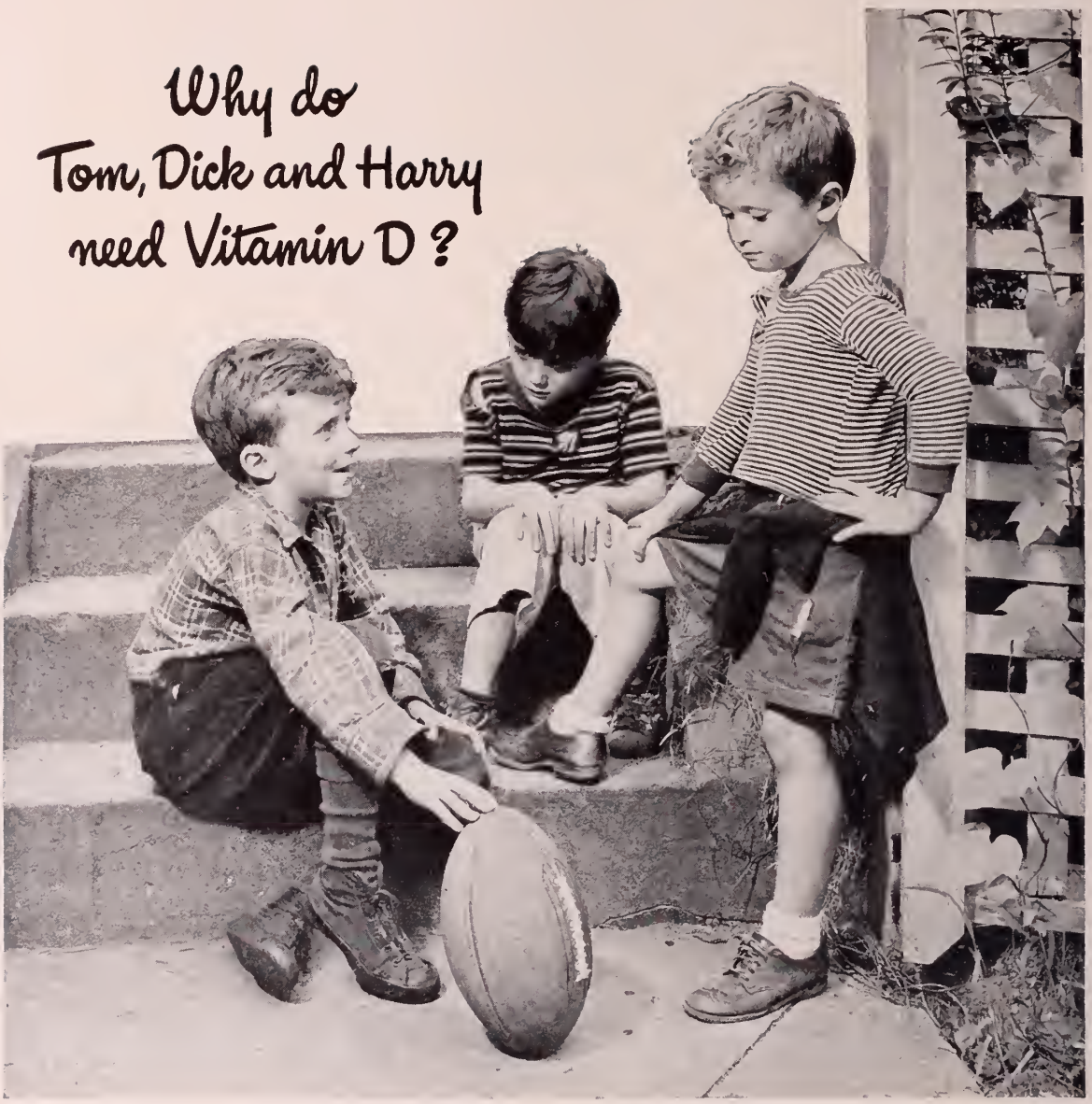
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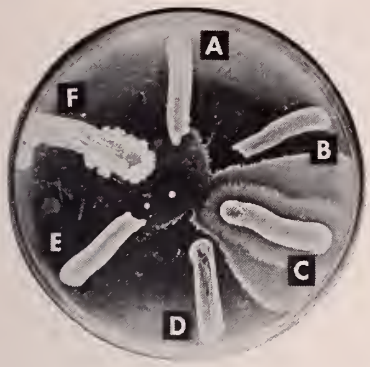
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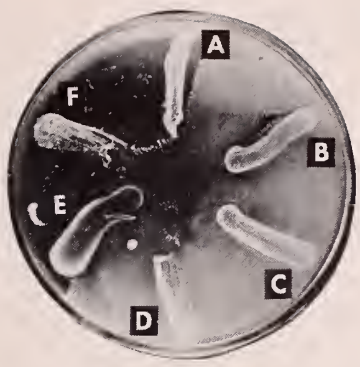
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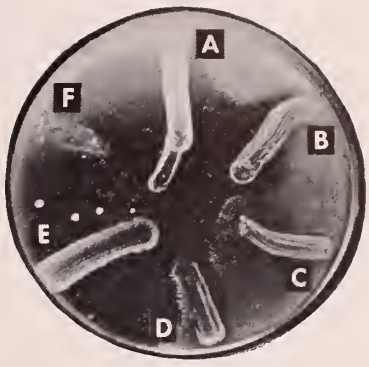
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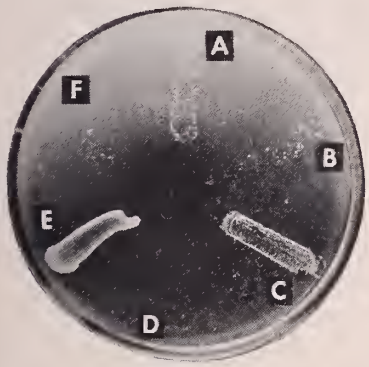
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Antibacterial Activity of STREPTOMYCIN

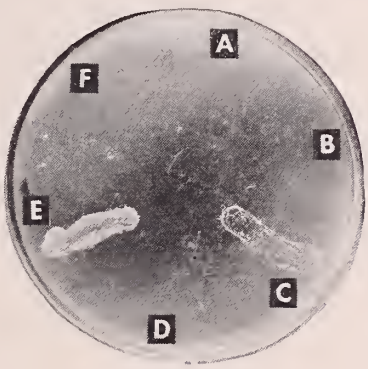
KEY TO PHOTOGRAPHS: • A. *Escherichia coli*
B. *Eberthella typhosa* • C. *B. proteus* • D. *Klebsiella pneumoniae*
E. *Bacillus pyocyaneus* • F. *Mycobacterium tuberculosis*
The numerals indicate micrograms of Streptomycin per cc. of agar.



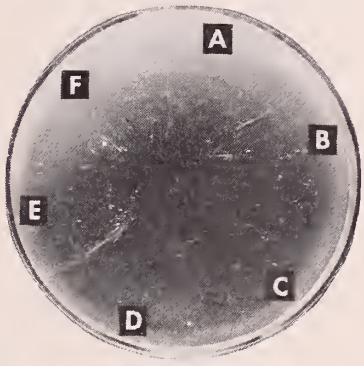
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26.



104.

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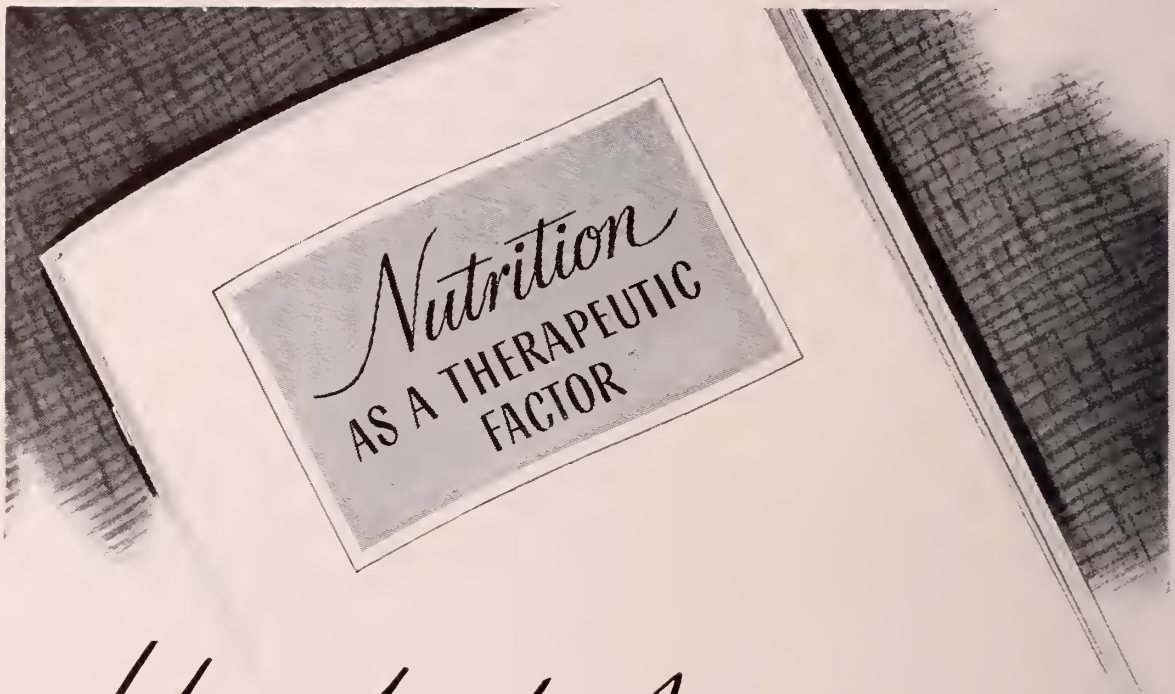
URINARY TRACT INFECTIONS
due to
susceptible gram-negative organisms

TULAREMIA

MENINGITIS
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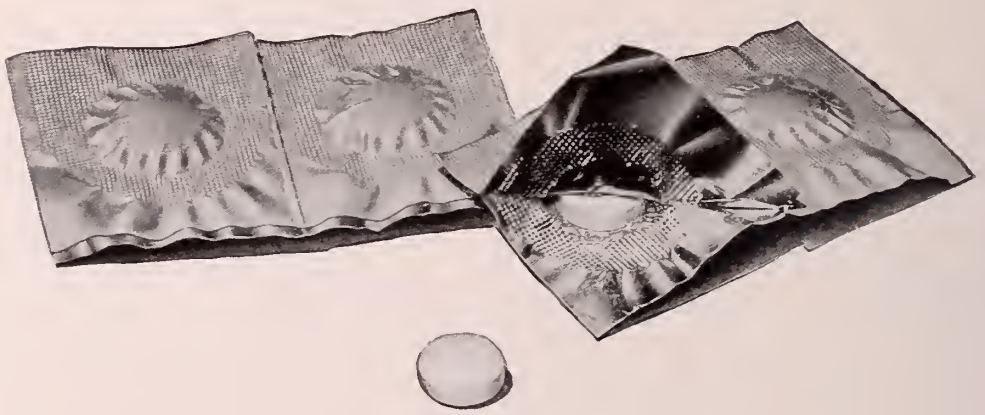
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1. Bunn, P. A.: in Conferences on Therapy: New York State J. Med. 46:527 (March 1) 1946. 2. Gyorgy, P.: Evans, K. W.; Rose, E. K.; Perlingiera, J. G., and Elias, W. F.: Pennsylvania M. J. 49:409 (Jan.) 1946.

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1. Poppe, J. K.: J.A.M.A. 129: 435 (Oct. 6) 1945.



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PULMONARY RESECTION FOR TUBERCULOSIS
PAUL W. GEBAUER, M.D.

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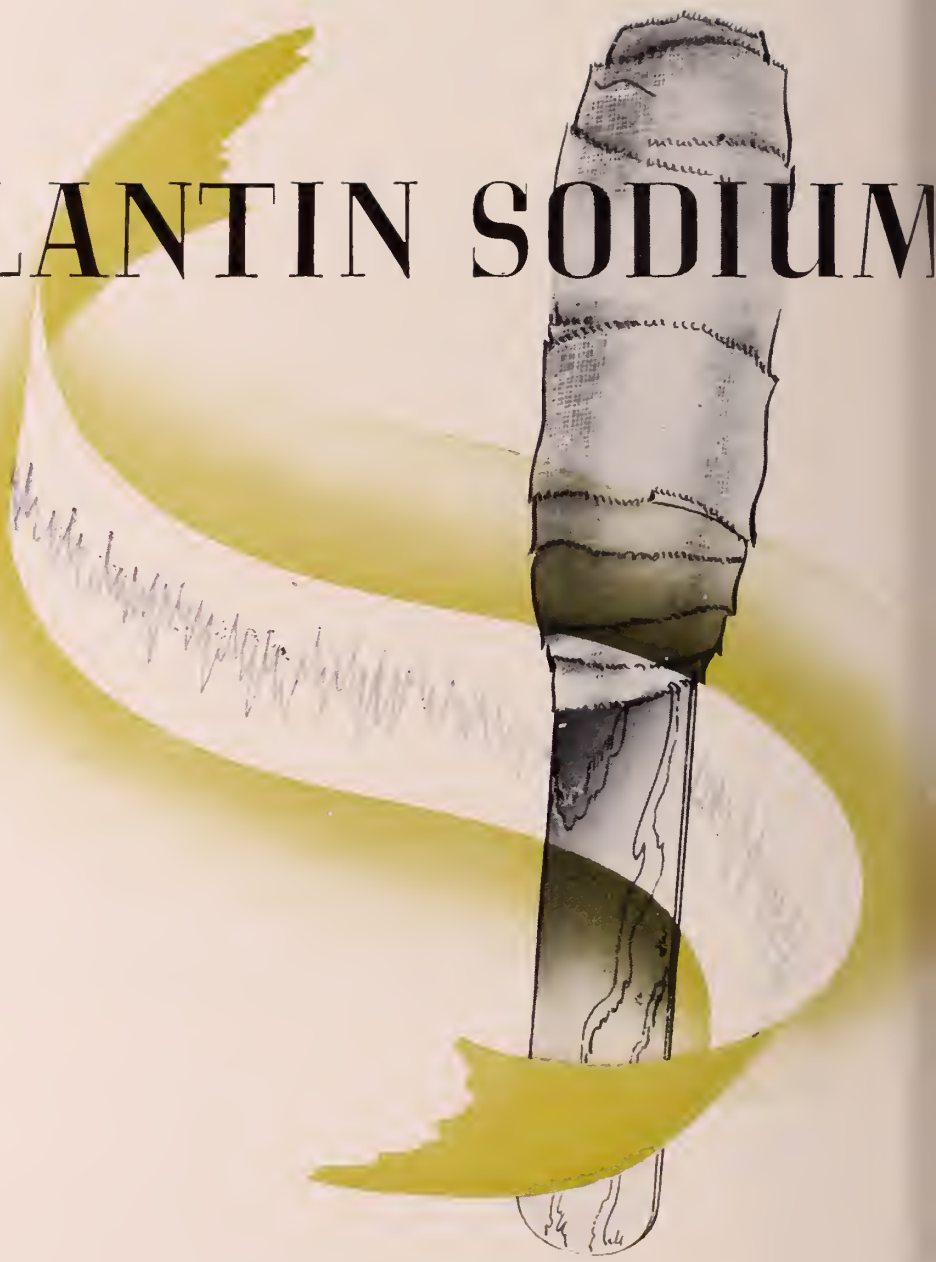
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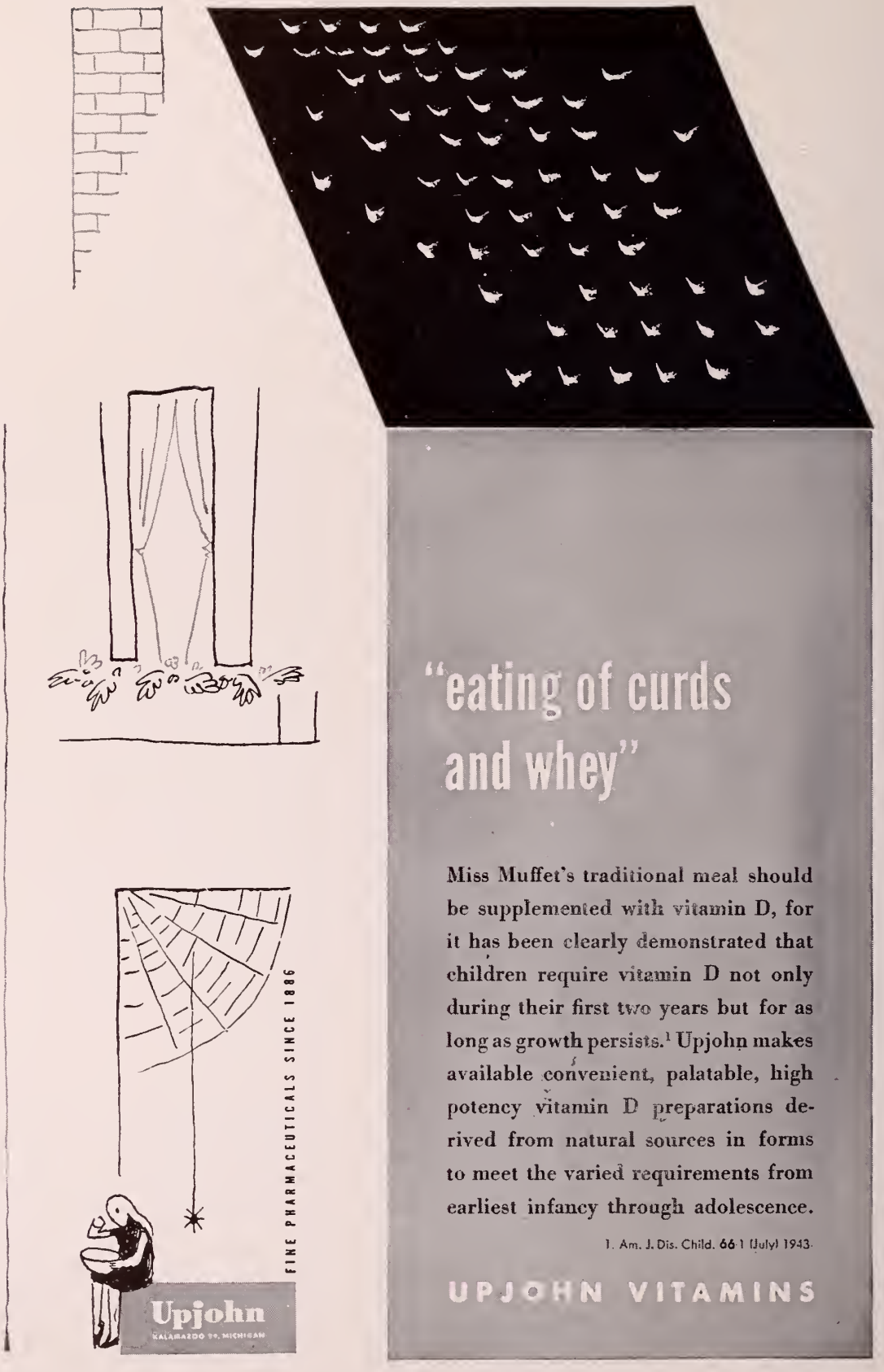
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1. Am. J. Dis. Child. 66:1 (July) 1943.
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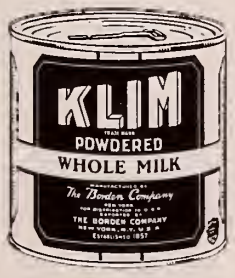
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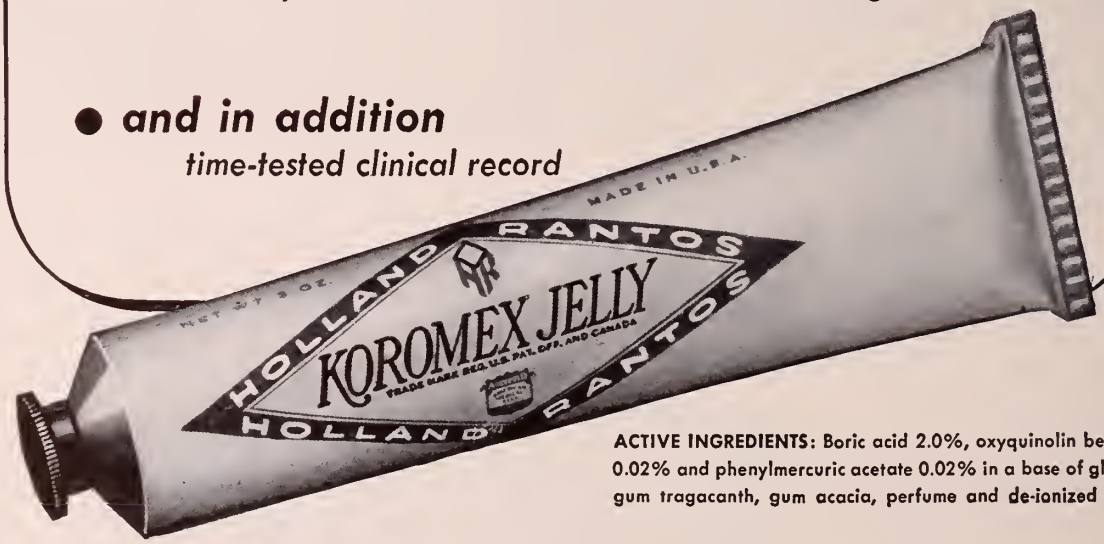
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Pneumoconiosis

PNEUMOCONIOSIS is particularly prevalent among workers in mines, smelteries, cement plants, and quarries. For years miners had experienced a high incidence of respiratory disorders. It was not until careful medical investigations had been made, however, that the causes were determined and steps taken to prevent recurrences. Pneumoconiosis is today a major problem of medical research. Other industries have their own peculiar hazards. As new materials and processes are introduced into industrial life, new techniques of detection, prevention, and treatment must be developed. This is the task of physicians concerned with industrial medicine. Through their efforts the level of health among industrial workers continues to improve.

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Pulmonary Resection For Tuberculosis

PAUL W. GEBAUER, M.D.
HONOLULU

Pulmonary resection for tuberculosis has recently emerged from the obscure, and is now settling into its proper therapeutic place despite numerous obstacles and a few remaining enemies.

In 1935 Freedlander[1] reported a successful upper lobectomy for the express purpose of eliciting expert opinion concerning the indications for such a procedure. In his patient a large cavity had long persisted in a thoroughly diseased lung despite a total collapse by a complete pneumothorax.

The hazard of a large open cavity in a collapsed, or an uncollapsed lung, has been burned repeatedly into the memory of all of us concerned with tuberculosis, by instance after instance of catastrophic spread of the disease to the good lung, and by our knowledge of the natural course of the disease—so that now the presence of such a lesion signifies that, sooner or later, it will be too late. The exception to the rule occurs so infrequently it never fails to provide surprises as well as pleasure.

This hazard is not lessened—on the contrary, in the experience of most of us it is enhanced—when the lung bearing the open lesion is expanded following an unsuccessful form of collapse. Such was the problem presented by Dr. Freedlander's patient. Should one continue an ineffectual pneumothorax which has not altered the hazard of spread and has added the hazard of pleural complications? Should one abandon the pneumothorax and increase the hazard of spread? Or would an attempt to remove the open lesion be warranted? I treated this patient in the post operative period, and I remember the discussion which —and some of the people whom—the case presentation provoked. Eleven years later, it is particularly interesting to me to read the expert opinions. In general, the result was praised, the real issue avoided. Today the indications for resection in such a case would be quite clear.

The medical literature of the ensuing years contained reports of small series of cases, some of them collected series, performed here and there, by numerous surgeons, with varied techniques and all sorts of indications, without preceding knowledge of the status of the tracheobronchial tree, and with various anesthetics. Only one thing was uniform: the inexperience of the surgeon. This was unavoidable, for it was the period of development of lobectomy and pneumonectomy. Tuberculosis had just recently become another of the disorders for which the new operation might be used. This literature can be regarded as milestones of progress; it cannot be appraised as evidence to support or condemn resection.

In 1943 Churchill and Klopstock[2] pointed out the shortcomings of previous statistics and reported six instances of lobectomy by an improved technique. The first three were not suitable candidates for thoracoplasty. It was indicated for the fourth, fifth and sixth patients, but lobectomy was elected more or less as an experiment. The justifications offered for such an alternative were anatomic and physiologic, namely: the preservation of a more intact bony thorax and shoulder girdle, the retention of better and more pulmonary function, and the local removal of the disease in contrast to its staged collapse by the ordinary thoracoplasty.

The true spirit and experimental aspects of this important paper were, I am afraid, frequently overlooked, and the inference gathered that lobectomy was preferable to thoracoplasty because it removed the disease, was less deforming, preserved more and better function, and so on. Quite naturally, controversy ensued between those who said, "You can't cut out tuberculosis," and those who replied, "You can't collapse a blocked lobe"; between the rib removers and the lobe removers. The cavity or offending lesion received all the attention; too little was paid to the patient, and to the status of the other lobes and the other lung.

This work was not regarded as a demonstration of the feasibility of lobectomy in tuberculosis with a satisfactory early postoperative course. Despite the absence of a long follow-up to prove the therapeutic value of lobectomy, it was accepted as evidence of the advisability of this procedure versus thoracoplasty. I feel that such was not its intent, and that it should be regarded in its true preliminary nature, not accepted as evidence of the superiority of lobectomy to thoracoplasty as a long-term therapeutic measure. Nevertheless, its publication was followed by an enthusiasm sufficient to warrant the devotion of the entire Febru-

Read before the monthly meeting of the Honolulu County Medical Society, September 6, 1946.

[1] Freedlander, S. O.: Lobectomy in Pulmonary Tuberculosis, J. Thoracic Surg. 5: 132 (Dec.), 1935.

[2] Churchill, E. D., and Klopstock, Robert R.: Lobectomy for Pulmonary Tuberculosis, Ann. Surg. 117: 641 (May), 1943.

ary, 1945 issue of the *Journal of Thoracic Surgery* to the subject. By hindsight, perhaps, this liberal application of resection was justified, for it has accelerated the usual slow development of a surgical procedure. In a relatively short time, mistakes have been corrected and pitfalls avoided, and resection is being persistently adjusted into its proper place.

Churchill and Klopstock were careful to confine their remarks to lobectomy, and to point out that the indications for pneumonectomy were distinct; that it was an irreversible procedure, never indicated in the face of any possible success by rest, collapse, or other therapy. Lobectomy, of course, is no less irreversible than pneumonectomy. In addition, experience to date indicates that as far as the "removal treatment" of tuberculosis is concerned, at the present time, it is not always possible to draw a distinct line between the two.

Sometimes the findings at operation indicate removal of more than the offending lobe. Rarely this is for technical and anatomic reasons, more frequently because simply arrested disease in a remaining lobe is quite likely to break down during its expansion in the postoperative period. Sometimes palpable lesions are found at operation, hidden from view in the x-rays by other structures; as a rule, however, such lesions, in supposedly good lobes, can be found if old x-rays are dug out for study. In either instance a decision which demands careful judgment has to be made by the surgeon. It would be poor surgery to uselessly remove an extra lobe, or an entire lung. It would be equally poor surgery to leave a diseased lobe which is likely to break down. Consequently, it requires a most careful preoperative study and evaluation before lobectomy can be advised and the possible necessity for pneumonectomy avoided. It behooves the surgeon ever to be alert to the fact that resection may mean more than lobectomy, and to be thoroughly familiar with the patient and the disease. I feel that a dense scar, or discrete, hard induration, indicate healing. In patients with ordinary resistance, especially when the x-rays are confirmatory, such lesions can be safely disregarded. On the other hand, x-ray evidence of recent activity, or soft or only firm infiltration, especially in patients with low resistance, call for additional resection. The status of the contralateral lung is another factor to be considered, for disease in it may justify a greater gamble on a questionable lesion.

The danger of reactivation is further controlled by avoiding or limiting postoperative overdistension of the remaining lung tissue, by "re-tailoring" the chest, as Overholt[3] has aptly put it. After upper lobectomy a modified thoracoplasty is done in the early postoperative period; a phrenic paralysis after lower lobectomy; and both after pneumonectomy.

Obviously, controversy between thoracoplasty and resection is much ado about little. Certainly, pneumonectomy is not indicated if thoracoplasty has a reasonable chance of success; and upper lobectomy is probably a better procedure when followed by a modified thoracoplasty. Therefore, if a little more extensive rib operation has a fair chance of success, why do a lobectomy, especially if there is, or has been, disease in the lower lobes? On the other hand, basal disease demanding permanent collapse is seldom controlled by minor procedures, and rarely by thoracoplasty, so that here lobectomy is the logical choice, as it is in a considerable number of other tuberculous states for which thoracoplasty has little or nothing to offer.

Overholt has reported the largest series of resections. He first pointed out the dangers of reactivation and the necessity for control and limitation of overdistension of residual lung tissue. He has had the best success in combating other serious complications, namely: early postoperative bronchiogenic spread to the contralateral lung, bronchial fistula, and tuberculous empyema. He found the majority of spreads occurring in the axillary branch of the opposite upper lobe. In the usual lateral operative position, this bronchus is the most dependent, and by the force of gravity would be inclined to receive the most bronchial spill from the operated side. From my own experience, I am certain that this happens. Overholt has avoided it by utilizing a suspended face-down operative position, and has thereby satisfactorily reduced the incidence of contralateral spread. I first used this position ten months ago. I have carefully bronchoscoped patients immediately before and after operation, and have not found evidence of the passage of any material from the operative to the good side. Of course, this is also prevented by ligature of the bronchus early in the operation. The hazard of spread is further lessened by frequent tracheobronchial aspiration during the operation, and bronchoscopic toilet afterwards. Overholt's operative technique, including the method of bronchial closure, has re-

[3] Overholt, H., and Wilson, J.: Pulmonary Resection in the Treatment of Pulmonary Tuberculosis, Am. Rev. Tuberc. 51: 18 (Jan.), 1945;

——— Pulmonary Resection for Tuberculosis complicated by Tuberculosis Bronchitis, Dis. of Chest, 11: 72 (Jan.-Feb.), 1945;

——— Pulmonary Resection in the Treatment of Tuberculosis, J. Thoracic Surg. 14: 55 (Feb.), 1945;

Overholt, R. H., Wilson, N. J., and Langer, L.: Further Experiences in Pulmonary Resection in the Treatment of Pulmonary Tuberculosis, presented at annual meeting of the American Association for Thoracic Surgery, Detroit, Michigan, May 31, 1946.

duced the hazard of empeyma and fistula to a reasonable level. He has continually altered his procedure to cope with problems successively presented. In view of his vast experience, his meticulous attention to technique, and his willingness to alter or diverge from standard procedures, I feel that his work must be allotted deference in any evaluation of pulmonary resection. My own limited experience has strengthened this attitude.

At the present time resection should be advised if it offers the only chance of living, a reasonable chance of cure, or, in contrast to other methods, the best chance of cure. I feel that many of its good results will represent salvage from hopeless disease, and that an occasional spectacular result will occur when all other methods of treatment have nothing to offer. It always will be a major surgical risk overshadowed only by the hazard of the disease itself. A rather high mortality is probably justified when we consider the present indications. They are in three groups: first, collapse failures; second, bronchial tuberculosis; and third, destroyed lung.

I. Collapse Failures.
 A. Open cavity under adequate thoracoplasty (including revision operation).
 Pneumonectomy rather than lobectomy will usually be indicated, because of:
 1. Unhealed disease in the lower lobe.
 2. Collapsed lower lobe (status of disease uncertain).
 3. Bronchiectasis in the lower lobe.
 4. Bronchial disease central to lobar divisions.
 5. Technical difficulties.
 B. Open lesion, parenchymal, bronchial, or both under inexpendable pneumothorax or empyema. Lobectomy will be applicable only in occasional instances because of 1-5 above.
 C. Lower lobe disease, without bronchial involvement, which fails to close with other forms of treatment.

II. Bronchial Tuberculosis.
 A. Bronchial stenosis with recurrent or persistent retention of sputum and the constitutional symptoms of poorly drained infection.
 B. Active bronchial tuberculosis with disease in lung segments distal to bronchial lesion, especially lower lobe (unsuitable for collapse).

III. Destroyed Lung. (Desperate risks.)
 A. Acute, extensive progressive, unilateral or unilobar disease with or without involvement of draining bronchi, especially in young people and susceptible races.
 B. Chronic apical disease with large cavity (periodically under positive tension) and disease confined to upper lobe. Results with thoracoplasty alone or combined with cavernostomy are not good. However, simply arrested disease in the inferior lobes dictates a trial with collapse, rather than a pneumonectomy or lobectomy followed perhaps by a flare up in remaining lobes. If collapse fails resection might still be done.

IV. Associated Disease.
 A. Bronchiectasis with open tuberculosis in which the diseased bronchi are suspected as the source of the positive sputum; or produce large amounts of sputum.
 B. Bronchiectasis productive, and symptomatic with closed tuberculosis.
 C. Recurrent hemorrhage.
 D. Progressive tuberculoma.

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Bronchoscopic Diagnosis in Non-Tuberculosis Chest Conditions

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TOO OFTEN, in the differential diagnosis of pulmonary disease, the physician is faced with problems which he cannot solve with the physical examination, blood count, sputum study and roentgenogram. Frequently only the passage of time permits the making of a diagnosis or the confirmation of a clinical impression. Because of this lapse of time, the diagnosis often is arrived at after the development of complications or too late for definitive therapy. In addition to the earlier use of the x-ray, more frequent examination of the sputum, and the use of radio-opaque materials such as lipiodol, the physician has available an excellent means of obtaining accurate and valuable diagnostic information: namely, the bronchoscope.

Too many of us still associate bronchoscopy with the removal of foreign bodies from the air passages; but it is a fact, not too well known, that in the modern endoscopy clinic, foreign body cases constitute less than 2 per cent of the cases examined. The plea for the use of bronchoscopy in diagnosis and treatment of pulmonary disease began over twenty years ago; yet today, except in the large medical centers, this procedure is too often neglected.

CONTRAINDICATIONS

The bronchoscopic examination is *not* a major surgical procedure, and when performed by a skilled operator is well tolerated by the young and old. Properly prepared patients experience no undue discomfort. In our experience at Leahi, comprising almost 900 bronchoscopic examinations on approximately 500 patients, we have had no serious complications and no deaths attributable to this procedure. Many of these patients were under treatment for advanced pulmonary tuberculosis and were acutely ill and debilitated. While age in itself is no contraindication, we do observe the following contraindications:

1. Recent myocardial disease.
2. Aortic aneurysm.
3. Severe hemoptysis.
4. Acute upper respiratory infection.
5. Active laryngeal disease.

Physicians dealing with pulmonary diseases have come to look upon the bronchoscope as a speculum used for direct inspection of the tracheobronchial tree. As such, it has had the indications for its use widened to include most pulmonary diseases, so that considerable information of diagnostic and therapeutic value has been derived from bronchoscopic studies.

INDICATIONS

Excluding pulmonary tuberculosis from this discussion, the indications for diagnostic bronchoscopy in pulmonary disease may be listed as follows:

1. Tracheal or mediastinal obstruction and compression.
2. Bronchial obstruction, as indicated by atelectasis, wheezing respiration, obstructive emphysema and sudden onset of dyspnea (foreign bodies; massive collapse of the lung).
3. Unexplained hemoptysis.
4. Unexplained cough, expectoration, dyspnea.
5. To obtain material for histologic or bacteriologic examination.
6. Bronchiectasis.
7. Lung abscess.
8. Asthma.
9. Prior to thoracic surgery to aid in selection of operation.

Tracheal obstruction does occur with mediastinal tumors or infections, cardiovascular anomalies—congenital or acquired—and foreign bodies. Bronchoscopic examination materially assists in locating these processes. Gross and Lewis[1] reported the case of a four year old child who had a large opening in the anterior mediastinum with free interpleural communication and an anomaly of the right upper lobe bronchus. The patient had experienced attacks of respiratory distress and was found to have emphysema of the right upper lobe protruding into the mediastinum and left pleural cavity. The mediastinum was repaired and the right upper lobe resected. Ferguson and Neuhauser[2] reported five cases of agenesis of one lung diagnosed during life by bronchoscopy and bronchogram. This condition is not incompatible with life, four of the reported cases living normal lives. Bronchoscopy is the only final method for accurate diagnosis. Tracheal obstruction is characterized by a wheeze, cough, dyspnea and at times cyanosis. Occasionally stridor, accompanied by insucking

Read before the monthly meeting of the Honolulu County Medical Society, September 6, 1946.

[1] Gross, R. E., and Lewis, J. E.: Defect of Anterior Mediastinum: Successful Surgical Repair, Surg., Gynec., & Obst. 80: 549 (May), 1945.

[2] Ferguson, C. F., and Neuhauser, E. B. D.: Congenital Absence of the Lung and Other Annmalies of the Tracheobronchial Tree, Am. J. Roentgenol. 52: 459 (Nov.), 1944.

of the suprasternal notch and epigastrium, is present if the obstruction to the airway is severe.

Bronchial obstruction is relatively common and may be due to intrabronchial, endobronchial or extrabronchial causes. The mechanism of bronchial obstruction is discussed in detail in an excellent study by Holinger and Andrews[3]. Intrabronchial obstructions, resulting from tenacious secretions, foreign bodies or aspirated material, are not only diagnosed by bronchoscopic examination but may be therapeutically benefited as well. The classical example of this type of obstruction is the postoperative massive collapse of the lung. This is due to the obstruction of one of the main bronchi by thick, tenacious secretion occurring postoperatively. Symptoms usually occur twenty-four to forty-eight hours after operation, and consist of chest pain and cough—usually non-productive. Because of pain, the cough is suppressed and shallow rapid respirations ensue, eventually resulting in labored breathing and cyanosis. This is accompanied by fever and change in character of whatever sputum is expectorated. The roentgen ray is extremely valuable and clearly indicates massive atelectasis of one lung. The bronchoscopic picture has been repeatedly described and is quite characteristic.

Lundy and his associates[4] emphasize the importance of bronchoscopic aspiration, especially at the end of intrapulmonary operations. Clagett, at the Mayo Clinic[5], uses the procedure routinely after the surgical treatment of bronchiectasis.

Endobronchial obstructions result from congenital anomalies, inflammatory processes and new growths, benign and malignant. Accurate differentiation can be made bronchoscopically, permitting early diagnosis and prompt treatment. Congenital bronchial web, resulting in respiratory distress and obstructive emphysema in the newborn, is diagnosed and promptly relieved by bronchoscopy alone. Inflammatory granulation tissue, in bronchiectasis, abscess and specific infections, often produces partial obstruction of the bronchial lumen with its attendant interference with drainage. Subsequent healing of these inflamed areas may produce considerable bronchial stenosis due to strictures. Bronchiectatic changes follow and pulmonary suppuration frequently results from such strictures. Benign and malignant tumors may produce similar signs of obstruction and must be differentiated bronchoscopically as well as by the history, physical examination and roentgenogram.

Extra bronchial obstructions may result from enlarged lymph nodes, mediastinal inflammation, mediastinal tumors and cysts, and cardiovascular anomalies. Bronchoscopic examination specifically localizes the level of obstruction and relieves the bronchial tree of secretions retained beyond the obstruction.

The obstruction of a bronchus, whether intra-, endo- or extra-bronchial, produces varying signs and symptoms, depending upon the degree of obstruction and the level of obstruction. Generally speaking, it results in a wheeze, atelectasis or obstructive emphysema and varying degrees of dyspnea. Considerable diagnostic information may be obtained from the history, physical examination, x-ray and bronchography studies, but a direct inspection of the bronchial tree offers far more accurate information, enabling the physician to institute therapy early.

Unexplained hemoptysis may be the presenting and only symptom, with no evidence of pulmonary disease roentgenologically. Not infrequently the bronchoscopist is able to trace the trickle of blood to a small adenoma or a small ulcer. Similarly, in cases of *unexplained cough, expectoration* and *dyspnea,* the lung parenchyma itself may be innocent and in its place one may find an inflammatory process or new growth in the tracheobronchial wall producing symptoms.

The bronchoscope is irreplaceable in *obtaining material for histologic and bacteriologic study*. In bronchogenic carcinoma a positive biopsy can be obtained in over 75 per cent of the cases by means of the bronchoscope. Holinger, Hara and Hirsh[6] reported positive biopsy in 136 of 175 cases (78 per cent). In 11 of the 39 negative biopsy cases, bronchoscopic findings were considered typical enough of bronchogenic carcinoma to confirm the diagnosis. Significantly, they point out that 50 per cent of the cases bronchoscoped had had symptoms less than six months, 42 per cent six months to one year, and 8 per cent had had symptoms more than one year. If thoracic surgery is to be effective in the treatment of bronchogenic carcinoma, the diagnosis must be made early. This can often be done bronchoscopically.

Bronchial tumors other than carcinoma occur. McDonald, Moersch and Tinney[7] report that in their series of bronchial neoplasms at the Mayo Clinic, 10 per cent of the cases belonged to the adenoma and cylindroma groups. In addition to

[3] Holinger, P., and Andrews, A. H., Jr.: Bronchial Obstruction, Signs, Symptoms and Diagnosis, Am. J. Surg. 54: 193 (Oct.), 1941.

[4] Lundy, J. S., Touhy, E. B., Adams, R. C., Mousel, L. H., and Seldon, T. H.: Annual Report for 1944 of Section on Anesthesiology, Proc. Staff Meet., Mayo Clinic 20: 292 (Aug. 22), 1945.

[5] Clagett, O. T.: Surgical Treatment of Bronchiectasis, Proc. Staff Meet., Mayo Clinic 20: 23 (Jan. 24), 1945.

[6] Holinger, P. H., Hara, H. J., and Hirsch, E. F.: Bronchogenic Carcinoma. An Analysis of 175 Proved Cases, Ann. Otol. Rhinol. and Laryngol. 54: 5 (March), 1945.

[7] McDonald, J. R., Moersch, H. J., Tinney, W. S.: Cylindroma of the Bronchus, J. Thoracic Surg. 14: 445 (Dec.), 1945.

the differential diagnosis made possible by bronchoscopy, many of these tumors can be removed successfully through the bronchoscope.

Bacteriological study is made possible by obtaining relatively uncontaminated specimens directly from the bronchial tree. In cases of slight or no apparent expectoration, bronchial lavage may give the laboratory sufficient for smear, culture and animal inoculation. With present day antibiotic therapeutic measures, carefully developed for the different forms of bacterial life, it is more important than ever to differentiate these types wherever possible.

The general indications enumerated above hold, as well, for the following conditions but due to their relative high incidence in population, they will be considered separately.

Bronchiectasis: Hinshaw,[8] of the Mayo Clinic, calls attention to the many pitfalls in diagnosis of this condition, stressing the fact that bronchogenic carcinoma, bronchial adenoma, foreign bodies and inflammatory strictures frequently are present and responsible for the development of the bronchiectasis. The early recognition and treatment of these prevent subsequent bronchiectasis. For that reason Olsen[9] in a recent article expressed the opinion that the majority of cases of suspected bronchiectasis should be bronchoscoped. Perhaps it was best summed up by Clerf[10] when he wrote that bronchoscopy is of value in bronchiectasis only as a diagnostic and as a palliative measure preparatory to the surgical treatment. We might add one more indication—the aspiration of secretions in the case turned down by the thoracic surgeon. Considerable relief can be obtained through such treatment. Continued bronchoscopic treatment of the case amenable to surgery is definitely not wise.

Lung abscess: Because there is often the question of a bronchial tumor complicated by lung suppuration, the chronic abscess case should be given the benefit of a diagnostic bronchoscopic examination. Differentiation without bronchoscopy is often difficult. In acute lung abscess, continued bronchoscopic treatment is not advisable for more than two weeks unless marked improvement is observed. Diagnostically the examination of the bronchial tree is useful in accurate localization of the abscess and securing material for bacteriological study.

Asthma: It is neither suggested, nor advisable, to subject every case of asthma to bronchoscopic examination. There are, however, certain instances in which bronchoscopy yields considerable information of diagnostic significance. Lell[11], at the University of Pennsylvania, reported on a series of 176 cases admitted to five different hospitals with symptoms of asthma not responding to orthodox treatment. Of these cases, 46 were found to be cases in which the wheeze was due to causes other than "true asthma." Twenty-three were due to foreign bodies in the larynx, bronchi and esophagus; 8 were due to laryngeal disease, 14 due to tracheal compression and one to a retropharyngeal abscess. It would seem that more careful study of asthma which does not respond to ordinary therapy is indicated, and that the bronchoscopist is often in the position to offer diagnostic help.

In conclusion we again emphasize that bronchoscopy is not meant to replace the careful history, physical examination, laboratory and x-ray studies indicated in the case of non-tuberculous pulmonary disease. Rather, it is to be looked upon as a diagnostic procedure to supplement the above methods, and, if properly carried out and wisely used, it can and does offer considerable help in the earlier diagnosis of pulmonary disease.

SUMMARY

The use of bronchoscopy as an aid in the diagnosis of non-tuberculous pulmonary disease is discussed. Indications for bronchoscopic examination are discussed according to respiratory symptoms as well as the specific uses in the commoner pulmonary diseases. Bronchoscopy is recommended in addition to, not in substitution of, diagnostic measures such as history, physical examination, roentgenogram, sputum examination and bronchography.

[8] Hinshaw, H. C.: Medical Aspects of Bronchiectasis, Proc. Staff Meet., Mayo Clinic 20: 17 (Jan. 24), 1945.

[9] Olsen, A. M.: Bronchoscopy in Diagnosis and Treatment of Bronchiectasis, Proc. Staff Meet., Mayo Clinic 20: 20 (Jan. 24), 1945.

[10] Clerf, L. H.: Peroral Endoscopy in Thoracic Surgery, Clinics 3: 1361 (Feb.), 1945.

[11] Lell, W. A.: Bronchoscopy as an Aid in the Diagnosis and Treatment of Allergic Pulmonary Disease, Arch. Otolaryngol. 43: 49 (Jan.), 1946.

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The Immunological Factor Involved in a Case of Hemolytic Disease of the Newborn

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THE ESTABLISHMENT of the role played in erythrobiastosis fetalis by the Rh factor makes it possible to explain the majority of cases of this disease. However, there are a certain percentage of cases in which the mother is Rh positive and thus the Rh factor cannot be involved. In order to explain these latter cases the idea was considered that such blood factors as the M, N, A and B could also act in the role of an antigen in pregnancy and thus stimulate production of antibodies or, in the case of the natural antibody being present, stimulate an increase in that antibody. Wiener[1], Halbrecht[2], Polayes[3], Nance [4], and others have reported cases of hemolytic disease of the newborn due to A and B antigenic stimulation and it is our purpose here to present the laboratory findings present in Case 4 in Dr. Nance's clinical report in the article referred to above.

In an attempt to explain why hemolytic disease of the newborn does not always occur when the mother is an O, A, or B and the child of a different type than she, Wiener[5] has hypothesized a bivalent or multivalent natural isohemagglutinin (for example, the anti-B naturally present in fairly low titer in a type A or O person) and a univalent antibody whose production is stimulated by the entrance of non-homologous red blood cells of the fetus in some still unestablished fashion into the pregnant woman's blood stream. The natural antibody would have too large a molecular structure to pass readily through the placenta into the blood stream of the fetus, whereas the univalent antibody could. Wiener also suggests that the natural (bivalent or multivalent) antibody could theoretically cause a certain degree of congenital hemolysis if it were present in abnormal concentration, either naturally or due to antigenic stimulation.

The case under consideration here was called to the attention of the Honolulu Peacetime Blood Bank laboratory following a diagnosis of erythroblastosis fetalis on a two day old Japanese infant. We were asked to check the hospital's laboratory findings which had found both mother and child positive for the Rh factor. The Blood Bank laboratory corroborated the findings of the hospital laboratory, finding the mother to be type ARh_1 and the child BRh_1. The question then arose as to the cause of the erythroblastosis, since it could not be due to the Rh factor.

In this connection several possibilities were considered. The possibility of the M or N factors being the cause of the hemolytic disease was discarded, since the mother was found to be type MN while the child was type M. Thus the mother could not be immunized to this factor.

The next factor suspected was the Hr. This was theoretically possible since both mother and child were Rh type Rh_1[6]. The Blood Bank was especially concerned about this possibility since the infant was receiving Rh negative blood, and Rh negative blood is positive to the Hr factor[6]. However, the fact that the infant not only tolerated, but improved following, the transfusion of the Rh negative blood, discounted the possibility of the Hr factor being involved. In order, however, to thoroughly check this possibility we wrote Dr. Wiener, outlining the case and requesting him to send us some anti-Hr serum which we did not have. He replied that he had none available but suggested there was a possibility of the B factor being involved since the mother was type A and the infant type B.

Acting on his suggestion a further whole blood sample was obtained from the mother, with Dr. Nance's approval, and the following tests were run:

[1] Wiener, A. S., Sonn, Eve B., and Hurst, Jane G.: Pathogenesis of Congenital Hemolytic Disease (Erythroblastosis Fetalis) III. Illustrative Case Histories of A-B Sensitization. Studies on Individual Differences in Human Blood and Their Practical Applications, Wiener Laboratories (July), 1946.

[2] Halbrecht, I.: Role of Hemoagglutinins Anti-A and Anti-B in Pathogenesis of Jaundice of the Newborn (Icterus Neonatorum Precox), Am. J. Dis. Child. 68: 248 (Oct.), 1944.

[3] Polayes, S. H.: Erythroblastosis Fetalis in Mothers with Rh Positive Blood. Report of Six Cases with Comment on Iso-immunization with "A" and "B" Agglutinogens, Am. J. Dis. Child. 69: 99 (Feb.), 1945.

[4] Nance, F. D.: Erythroblastosis and Icterus Praecox. HAW. M. J. 6: 26 (Sept.-Oct.), 1946.

[5] Wiener, A. S.: Pathogensis of Congenital Hemolytic Disease (Erythroblastosis Fetalis). I. Theoretical Considerations, Amer. J. Dis. Child. 71: 14 (Jan.), 1946.

Supervising Technician, Blood Bank of Hawaii. Received for publication December 10, 1946.

[6] Wiener, A. S.: The Rh Blood Types and Some of Their Applications, Am. J. Clin. Path. 15: 106 (March), 1945.

	DILUTION OF SERUM							
	1:20	1:40	1:80	1:160	1:320	1:640	1:1280	1:2560
Agglutination (mother's serum in saline dil. plus washed B cells)	+	+	+	+	+	+	+	—
Conglutination (mother's serum in B serum dil. plus B cells in B serum)	+	+	+	+	+	+	+	+
Control (typing serum in saline dil. plus washed B cells)	+	+	+	—	—	—	—	—

The test was set up as follows: the test-tube dilution method was used. Tubes were then incubated at 37° C. for one hour in the water bath and then placed in the ice-box for two hours, after which time they were read. The agglutination test was run to detect the presence of multivalent or bivalent antibody and the conglutination test for the detection of univalent antibody.

Similar tests were set up one year later, the results of which were as follows: the agglutinating titer of the mother's serum was 1:10,240 and the conglutinating titer was 1:20,480, which was as high as the titrations were run. Tests were also done for the detection of blocking antibody and this was found to inhibit the action of anti-B typing serum in dilutions up to 1:5120. No further pregnancies have occurred during the past year.

The blood typing of the family was found to be as follows:

	Blood type	Rh type	MN type
Father	AB	Rh_1	N
Mother	A	Rh_1	MN
First child (died at 15 months of meningitis. Normal at birth)	B	unknown	unknown
Second child (normal at birth)	B	Rh_1	MN
Third child (developed erythroblastosis fetalis two days after birth)	B	Rh_1	M

DISCUSSION

From the results of the tests done at the time that the erythroblastosis occurred in the third child it was concluded that the disease was due to sensitization of the mother by B agglutinogen which stimulated not only the production of high titered agglutinins but of even higher titered conglutinins. The results of the tests done a year later would seem to indicate that the birth of the first two children had given the original stimulus and that the birth of the third child had even further increased the immunization of the mother by the B factor since the second series of tests ran higher titers than the original. It will also be noticed that in both series of tests the conglutinin titer was higher than the agglutinin, which would seem to bear out Wiener's hypothesis that two different types of antibodies are involved in such immunological reactions. The demonstration of the presence of blocking antibody would seem to bear out this hypothesis even further.

SUMMARY

The laboratory work done in trying to establish the immunological factor concerned in a case of erythroblastosis fetalis in an Rh positive infant of an Rh positive mother has been presented. This case was of particular interest because most cases of hemolytic disease of the newborn considered due to A-B antigenic stimulation which have been reported in the literature have been of a benign nature, whereas this particular case was one of true erythroblastosis fetalis[4]. The results of the tests run justify the conclusion that this case was due to the production of high titered anti-B agglutinins or conglutinins, or both, produced in the mother following antigenic stimulation by the B factor.

Congenital Heart Disease

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IN THE third edition of Paul White's *Heart Disease,* it is interesting to note that under the chapter entitled "Congenital Cardiovascular Defects," he states, "It is fortunate that congenital defects of the heart and great vessels are relatively rare . . ." In the statistics gathered by White and Jones in 1928 and by Gelfman and Levine in 1942, as well as by Abbott[1] in her tremendous series of cases, congenital defects of the heart are, generally speaking, relatively rare. However, with more and more interest being shown in congenital cardiac anomalies, and with the newer methods of study and approach, it is felt that congenital defects of the cardiovascular system will reach a much higher incidence than that which has been found in the past.

Dr. Eleanor deF. Baldwin[2] and her associates say that "isolated ventricular septal defects are not uncommon." Many of us know that numerous instances of ventricular septal defect are not recognized during life, being found only at necropsy. Through the work of Cournand[3], much has been learned about congenital defects which heretofore has escaped our attention. Not only have new fields in cardiology been opened up, but far reaching advances have been made in physiology of the heart and in electrocardiology which previously have been a matter of theory and conjecture.

One great difficulty in making a clear-cut diagnosis of a congenital defect is that when one defect is noted, another can often be found, although in a series of 105 cases Abbott[4] found only 35 which had more than one anomaly.

The congenital heart defects clinically classified by Abbott[5] fall into three main groups: (1) cases without abnormal communications or shunts between the right and left sides of the heart (acyanotic); (2) cases of arteriovenous shunt with possible terminal or transient reversal of flow (*cyanose tardive*) and (3) cases of venoarterial shunt (morbus ceruleus) (cyanotic).

As a rule congenital defects are camouflaged by other defects of the cardiovascular system. I recall a case recently seen at Bellevue hospital in New York, in which the clinical findings were so aberrant, with the exception of extreme cyanosis, that the diagnosis of tetralogy of Fallot was entirely missed, but proven at autopsy. Another case which comes to mind is that of a small child seen at the Good Samaritan Hospital in Boston whose rheumatic history and course were so pronounced that a patent ductus was nearly missed. In the congenital defects to be discussed in this paper, surgery is the best procedure of treatment. However, before surgery is attempted it is necessary that a correct diagnosis be made, as it is quite awkward when the surgeon has opened up the chest prepared for one type of operation and either the abnormality is not there, or it is complicated in such a manner that he has to back out. The surgeon must know what he is to operate for and on.

Among the newer aids to diagnosis Cournand[6] has developed a technique which has become invaluable in the diagnosis of congenital disease and is being used daily at Bellevue Hospital: the catheterization of the heart. This consists of inserting a radio-opaque catheter into the antecubital vein, the forward end of which contains a small curved tip, then with the aid of fluoroscopy pushing the catheter forward up through the basilic, axillary, subclavian and innominate veins, through the superior vena cava and thence into the right heart. By means of such catheterization samples of blood at various levels may be withdrawn and compared with the blood of the peripheral circulation. Through this technique, devised by Cournand and others, it is now possible to make a more definite diagnosis of certain of the congenital defects. Likewise by using this technique Hecht[7] has been able to trace the course of the action current of the human heart by placing an exploring electrode within the catheter and taking tracings at various levels within the heart.

In order that we may have a clearer understanding of those congenital defects which may be diag-

[1] Abbott, M. E.: Congenital Heart Disease. Nelson New Loose Leaf Medicine, Thos. Nelson & Sons, New York, N. Y., 1920, vol. IV, p. 207-321.

[2] Baldwin, E. deF.; Moore, L. V., and Noble, R. P.: The Demonstration of Ventricular Septal Defect by Means of Right Heart Catheterization, Am. Heart J. 32: 152 (Aug.), 1946.

[3] Cournand, A., and Ranges, H. A.: Catheterization of Right Auricle in Man, Proc. Soc. Exper. Biol. & Med. 46: 462 (Mar.), 1941.

[4] Abbott, M. E.: Congenital Heart Disease, Osler's Modern Medicine, vol. 4, ed. 3, 1927.

[5] Abbott, M. E., and Dawson, W. T.: The Clinical Classification of Congenital Cardiac Disease, with remarks upon its Pathological Anatomy, Diagnosis, and Treatment, Internat. Clin. 4: 155 (Dec.), 1924.

Received for publication, October 30, 1946.

[6] Cournand, A.; Riley, R. S.; Baldwin, E. deF.; and Richards, D. W. Jr.: The Measurement of Cardiac Output in Man, J. Clin. Invest. 24: 106 (Jan.), 1945.

[7] Hecht, H. H.: Potential Variations of the Right Auricular and Ventricular Cavities in Man, Am. Heart J. 32: 39 (July), 1946.

nosed correctly and for which we can do something beneficial the following congenital defects are presented and discussed: patent ductus arteriosus, coarctation of the aorta, and pulmonary stenosis (tetralogy of Fallot). It has been found that up to two years of age nothing can be done, but over two years of age these deformities can be helped surgically. At this time investigation and surgical procedures for auricular and ventricular septal defects are being made, with the hope that they too will come within the scope of surgical procedures.

PATENT DUCTUS ARTERIOSUS

Patent ductus arteriosus is a congenital defect in which the heart is required to put out more blood than normally, thereby causing an increased burden on the left ventricle which finally results in left ventricular failure. In securing the history of a patient with patent ductus, you will usually learn that a murmur has been present since birth; that the patient has not been cyanotic and there has been no clubbing of the fingers; that upon exertion the patient has always felt weak, has shortness of breath and other symptoms of left sided failure.

On physical examination one may find either a normal or an enlarged heart but of greater consequence will be the characteristic murmur. This is a machinery-like murmur, and when once heard will never be forgotten. The murmur is louder in systole than in diastole, with the systolic phase going right through diastole. This murmur is best heard in the pulmonic area in the first, second or third interspace to the left of the sternum and it is also readily audible in the back. The sequence of events is due to the blood leaking across from the aorta into the pulmonary artery—hence the loud, to and fro, harsh machinery-like murmur. A striking fall in the diastolic blood pressure is noted upon exercise, e.g., 120/80 to 130/40. This will give one some idea as to the size of the patency.

Usually fluoroscopy and x-ray will be of aid, as an enlargement of the left ventricle will be shown with fullness of the pulmonary artery[8] as well as a prominence of the hilar shadows. The left auricle is not prominent in the oblique views. The electrocardiograph is not of much help. It may either be normal, or show a left axis deviation.

If, however, it should show a tracing of right axis deviation, you can be assured there is a complicating factor. If the diagnosis is missed in patent ductus and nothing is done, one of two things, or both, will result; left ventricular failure or subacute bacterial endocarditis. The latter condition seems to have a predilection for an area located between the aorta and the pulmonary vessels to the lungs.

When the diagnosis of patent ductus arteriosus is made, one indication for surgery is that the patient be in the right age group: 3 to 15. Surgery has been accomplished on adults up to the age of 30; however, in this older age group, you usually run into technical difficulties such as placques, tortuosities, etc. Surgery was first proposed by Munro[9] in 1907 after he had worked out a procedure following the death of a small child with a patent ductus which was discovered at autopsy. It was not until 1938 that Graybiel[10] and his associates made an attempt to ligate the ductus in a patient with subacute bacterial endocarditis. In 1939, Gross[11] and his co-workers reported the first successful ligation of a patent ductus. One of the complications of patent ductus arteriosus, as mentioned above, is subacute bacterial endocarditis. In 1940, Touroff and Vessel[12] reported the first recovery from subacute bacterial endarteritis in a patient with patent ductus arteriosus, effected by surgery. Since this time many operations for patent ductus have been successfully completed[13].

It is wise, preceding and following operation for patent ductus, to use chemotherapy. The surgical procedure consists of exposing the pulmonary artery, tying off the duct at both ends, and severing the duct in the middle. This is the technique used by Gross[14] at Children's Hospital in Boston. In July, 1946, Dr. Gross had completed a series of 65 patent ductus ligations without a fatality. Blalock[15] of New York City who has done extensive work in this field just sutures the duct. Others have used cellophane which causes constriction and proliferation of the adventitia.

COARCTATION OF THE AORTA

Coarctation of the aorta is a congenital defect in which there is a narrowing or constriction, usually in the vicinity of the insertion of the duc-

[8] Yater, W. M.: Fundamentals of Internal Medicine, ed. 2, Appleton-Century Co., Inc., New York, N. Y., 1944, p. 36.

[9] Munro, J. C.: Ligation of the Ductus Arteriosus, Am. J. Surg. 46: 335 (July), 1907.

[10] Graybiel, A.; Strieder, J. W., and Boyer, N.: An Attempt to Obliterate the Patent Ductus Arteriosus in a Patient with Subacute Bacterial Endocarditis, Am. Heart J. 15: 621 (May), 1938.

[11] Gross, R. E., and Hubbard, J. P.: Surgical Ligation of a Patent Ductus Arteriosus, J.A.M.A. 112: 729 (Feb.), 1939.

[12] Touroff, A. S. W., and Vessel, H.: Sub.Streptococcus Viridans Endarteritis Complicating Patent Ductus Arteriosus, J.A.M.A. 115: 1270 (Oct.), 1940.

[13] Vessel, H., and Kross, I.: Patent Ductus Arteriosus with Subacute Bacterial Endarteritis, Arch. Int. Med. 77: 659 (June), 1946.

[14] Gross, R. E.: Surgical Correction for Coarctation of the Aorta, Surgery 18: 673 (Dec.), 1945.

[15] Blalock, A.: The Physio-pathology and Surgical Treatment of Congenital Cardiovascular Defects, Bul. N. Y. Acad. Med. 22: 57 (Feb.), 1946.

tus arteriosus. It is a fairly common anomaly. Two types have been noted, infantile and adult. The former is rare and practically incompatible with life (nine months). The latter is less serious and compatible with life. The incidence is higher in the male (3-1). The adult type is almost always a prenatal condition, which develops in the fetus and the only type which persists after the first year of life.

The aorta is usually considerably dilated above the constriction and sometimes an aneurysm develops. Often, but not always, there is a narrowing below the constriction. Of further interest is the development of an extensive collateral circulation so that blood may be carried to the lower parts of the body. This is carried out by widely dilated and tortuous internal mammary, scapular and intercostal arteries. There is an enlargement of the heart, with both hypertrophy and dilatation. The latter is the result of an accompanying hypertension or an acquired valvular disease.

Usually this condition is observed in the course of routine examinations. In doing a routine examination on the nurses in Lenox Hill Hospital in New York, one was found to have extremely high blood pressure for a girl of her age. Her history was uninformative and she had no complaints (this is usual, especially in the younger age groups: patients will merely state that they have been told they have high blood pressure). We had the young woman x-rayed and the classical sign of notching of the inferior surfaces of the ribs was found. Upon further examination it was found that the blood pressure in the lower extremities was extremely low and there was no palpable femoral arterial pulse. Here was a classical case of coarctation of the aorta.

Many times evidence of compensatory collateral circulation will be apparent, and pulsations can be seen and felt in the above mentioned arteries. Usually a long systolic murmur may be heard in the third and fourth interspaces a little to the left of the sternum; it may be faint, but it can be heard with the same intensity over the back. Pathognomonic are the x-ray findings of the notched ribs, and decrease or absence of the aortic knob, frequently associated with a dilated portion of the ascending aorta and first part of the arch[16]. The surgical procedure for correcting this condition is an end-to-end anastomosis. While the procedure is still in the experimental stage, there have been many successful operations performed.

[16] Schwedel, J. B.: Clinical Roentgenology of the Heart, New York, Paul B. Hoeber, Inc., 1946, vol. 18, pp. 335-336.

PULMONARY STENOSIS

Pulmonary stenosis, which is a part or a complication of tetralogy of Fallot, was classically described in 1888[17]. Dextroposition of the aorta, right ventricular hypertrophy, interventricular septal defect (usually the upper end of the septum) and pulmonary stenosis make up the complete "tetralogy." This is the commonest congenital defect which causes cyanosis. As a result of the defect a rise in the pressure is created in the right ventricle which naturally causes it to hypertrophy. The blood going out of the aorta into the systemic circulation is a mixture of arterial and venous blood. This results in much of the blood being under-oxygenized and as a compensatory mechanism the hemotapoietic system produces more red blood cells (polycythemia); in fact, the hematocrit may go as high as 86 per cent. Even with this increase in the red blood cell count, cyanosis still persists, due to the fact that there is a lack of contact of a large percentage of red cells with the oxygen in the alveoli of the lungs[18]. Whereas the oxygen carrying capacity of the blood may be doubled, the oxygen saturation is halved. The viscosity of the blood is increased, due to increased proportion of cellular constituents. This in turn calls for more work by the heart and circulation, and vasodilatation occurs. This latter is likewise a compensatory mechanism so that more oxygen can be distributed to the tissues and in part relieve the strain on the heart.

In taking the history of such a patient you will usually learn he was a blue baby and that there was clubbing of the fingers. It will be further learned that he does not get particularly out of breath, but becomes easily fatigued upon exertion.

On physical examination one finds cyanosis (when capillary blood contains approximately 5 gm. of reduced hemoglobin per 100 cc., cyanosis results). There will be clubbing of the fingers. X-ray shows a characteristic "boot-shaped" heart[19]. There is no prominence in the region of the pulmonary artery and few or no hilar markings. There may or may not be a murmur. If there is, it is a loud systolic murmur, again best heard in the pulmonic area in the third interspace to the left of the sternum. Generally there is an accompanying thrill, systolic in time in the same area. The electrocardiogram as a rule shows right axis deviation and right ventricular preponderance.

[17] Fallot, A.: Contribution à l'anatomie pathologique de la maladie bleu, Marseille Méd. 15: 77, 138, 207, 270, 341, 403, ed. 4, 1888.

[18] Wiggers, C. J.: Physiology in Health and Disease, Lea & Febiger, Philadelphia, ed. 4, 1945, p. 462.

[19] Schwedel, J. B.: Clinical Roentgenology of the Heart, New York, Paul B. Hoeber, Inc., 1946, vol. 18, pp. 323-331.

One must bear in mind a very like condition, although a rare one, the Eisenmenger complex, in which there is an increased size of the pulmonary valve and pulmonary conus as well as dilatation of the first, second and third branches of the pulmonary artery.

The complications of the tetralogy of Fallot are invalidism and a gradual down-hill course with a fatal termination. Subacute bacterial endocarditis is common, as is tuberculosis.

Indications for operation again begin with a correct diagnosis of all the findings. This is difficult clinically. The patient should be in the age group between 2 and 12. The mortality is about 16 per cent and a resulting hemiplegia occurs in about 20 per cent. Life expectancy is about twelve years. The operation consists of anastomosis of the innominate artery into the pulmonary, thus allowing more blood to get into the lungs and thereby into the left ventricle. As this puts an increased load on the left ventricle, left ventricular failure may result. The surgical procedure, if successful, does allow the patient to carry on much more successfully and become a useful citizen, rather than having a shorter span of life and being an invalid. As the surgical procedure is relatively new in this condition (one and a half years) the final story is not known as to the permanency of results.

SUMMARY

Three congenital cardiac defects have been presented and discussed, in which surgery should be considered and holds out as a primary procedure of treatment. Some anatomical and physiological as well as pathological points are discussed. The fundamental symptoms, signs, x-ray and electrocardiographic findings are also presented together with the newer methods of diagnosis as used by Cournand and others.

346 Young Building.

Hawaii
MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE HAWAII TERRITORIAL MEDICAL ASSOCIATION

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[EDITORIALS]

BOOKS AND BOOK REVIEWS

A section devoted entirely to book reviews is being started on page 249 of this issue of the HAWAII MEDICAL JOURNAL. This is being done partly as a service to our readers, who may well be more interested in the opinions of their acquaintances and friends, than in the opinions of strangers; partly as a service to the publishers, who want potential purchasers informed regarding their wares; and partly in order to help increase the acquisitions of the Honolulu County Medical Library.

Doctors who are willing to write reviews of new books are invited to so inform Mrs. Bennett, at 3990 in the Mabel Smyth Building. We will be grateful for your assistance, and you—in the case of those publishers who are in a position to send us two copies for review—may well be grateful for the present of a free copy of the book.

* * *

THE RECORD LIBRARIAN – FRIEND, NOT FOE

Many a doctor who keeps good clinical records in his office, who has frequent occasion to depend upon well-kept hospital records of his patients' previous admissions, and who would be outraged if American College of Surgeons approval were withdrawn (because of ill-kept records) from the hospitals in which he works, is in the singular position of employing (even if only indirectly) expert help to keep these hospital records in good condition and—at the same time—doing everything in his power to make that help's life miserable and her efforts unavailing.

There is only one correct way to keep records in any given hospital, for uniformity is essential. Diagnoses must conform to a standard pattern, and they must be complete, and they must be justified by the contents of the record. "Amp. toe" will not do. Which toe? Of which foot? How was it amp(utated)? "Chronic myocarditis" will not do except in those very rare instances in which it is present, and the findings in the records justify it. "Hypertension" is not a diagnosis: it is a physical finding. What kind of hypertension is it? Is the heart affected too, or is it merely vascular disease?

The record librarian who asks the above questions is not asking them for the purpose of annoying the doctor—she is asking them for the purpose of helping him complete his records properly. She is his assistant, not his opponent. To answer her inquiries rudely or angrily is inexcusable, and to refuse to answer them at all is worse. It is bad enough that she should have to ask them at all.

And it isn't because the doctor is too busy, either. By and large, the busiest doctors give the record librarians the least trouble. What do you suppose *is* the reason for it? How much of a nuisance have *you* been, lately?

* * *

IT CAN HAPPEN HERE

What doctors fear more than anything else is interference of the State with the responsibility of the individual doctor for his own patient.

A patient of Dr. Foxell's suffered from cancer of the oesophagus which proved to be inoperable. As gastrostomy was performed in hospital, and as he had lost over two stones in weight the hospital dietetic expert and the consultant surgeon

decided the patient should have 2 oz. of fat a day as butter or margarine. Just before discharge of the patient from hospital, Dr. Foxell gave to the local food office the necessary particulars and "the medical reasons why the extra rations are considered necessary." The local food officer granted the extra fat. Some days later Dr. Foxell received from this officer a copy of a letter from the divisional food officer of the Ministry of Food stating that the extra butter could not be continued. Dr. Foxell was informed that the medical advisers to the Ministry of Food considered there was "no need for extra butter in such cases as there is no call for a lubricant for swallowing as the operation allows the food to be inserted below the obstruction." No doubt the medical advisers to the Ministry of Food considered that Dr. Foxell and the surgeon who had done the operation were ignorant of these simple facts. Dr. Foxell, however, having the interests of his patient at heart, ignored the snub and explained in a personal letter to Dr. Edith Summerskill, Parliamentary Secretary for the Ministry of Food, that he had ordered upon consultation with a dietetic expert, the extra fat in order to maintain the life of his patient. Dr. Summerskill backed up the medical advisers who had not seen the patient, continued to treat at a distance, and allowed an extra 2 oz. butter *per week* "on compassionate grounds." Dr. Foxell concluded the correspondence with a letter on Nov. 29 to Dr. Edith Summerskill thus: "With reference to your letter of Nov. 18, the patient about whom I wrote died suddenly from haemorrhage a few days ago. Therefore my fight to try to prolong his life is now ended." One may be permitted to wonder what the patient in his last unhappy days thought of a State machine which deprived him of the 2 oz. of fat a day which he had been recommended in hospital. We may doubt whether he fully appreciated the humanity of the decision to allow him 2 oz. a week "on compassionate grounds."

British Medical Journal

December 28, 1946

* * *

MEDICAL CARE PLANS

It is a pleasure to announce that our Hawaii Medical Service Association is now a member of the Associated Medical Care Plans. This is a national organization of health prepayment plans which have met the requirements of the American Medical Association Council on Medical Service.

Our H.M.S.A. is a sound and practical plan. Let's all support it and help it grow!

NOTICE TO CONTRIBUTORS

Please read *Medical Writing,* by Morris Fishbein, before you write the final draft of the final *revision* of your next contribution to a medical journal.

In case you don't get around to it, however, please note the following suggestions:

1. *Don't* submit the same paper to two different journals.

2. *Don't* type *any* part of any paper single-spaced; *double-space everything*—the references and captions as well as the text.

3. Please, *please* be sure your references are *complete* and in the standard A.M.A. form. If they are not complete, you will have to look them all up again and complete them. Mrs. Hill or Mrs. Ohms, in the Honolulu County Medical Library, will be glad to see that they are right the first time.

4. *Don't* fasten your illustrations to sheets of paper and attach the captions to them: the captions, like the footnotes, should be typed double-space on a separate sheet following the body of the manuscript. Pencil your name *lightly* on the back of each picture and mark it "Fig. 1" or "Fig. 2" or what you will. Put all the pictures loose in an envelope to accompany the paper.

5. *Don't* refer to footnotes by numbers in parentheses, thus: (1). Put the reference numbers above the line, thus: [1]. If you do them the other way, every one has to be crossed out and written in correctly.

6. Don't keep all your interesting and instructive cases to yourselves; don't be discouraged by all this advice; go ahead and write a case report and send it in. It will be certain to help you, and it may help a few others as well.

* * *

SWIMMERS' DERMATITIS IN HAWAII

Of special interest to Hawaii's physicians is the lead article in the December, 1946 issue of the *Archives of Dermatology and Syphilology.* Written by Dr. Gerard De Oreo (formerly Major, M.C., A.U.S., and chief of the dermatology service at Tripler General Hospital during the war), it is entitled "Dematitis Venenata Resulting from Contact with Marine Animals (Hydroids)."

This new disorder, to which swimmers in Hawaii are liable, was first recognized by Dr. De Oreo in military personnel who had climbed on and off the raft at the Fort De Russy swimming pool. It has the general appearance and clinical

characteristics of a dermatitis venenata—a patchy red papular or vesicular rash with itching and burning and sometimes systemic manifestations: malaise, fever, moderate leucocytosis and eosinophilia.

It is caused by even fleeting contact with a plant-like marine animal, a hydroid of the genus Halecium, which grows on submerged surfaces (pilings, rafts, boat bottoms) as a fine moss-like growth an inch or so thick. Like the other coelenterates, Halecium possesses tentacles covered with little stinging cells called nematocysts, which are released, on contact, and penetrate the skin, producing the dermatitis. The mechanism is the same as that by which the Portuguese Man of War, so-called, stings human beings. The dermatitis is self-limited, subsiding in a few days. Only the usual symptomatic treatment accorded a dermatitis venenata is required. Calcium gluconate injections were helpful in relieving associated muscle spasm when that was present, but did not affect the course of the skin lesions.

The next time you see a puzzling case of patchy dermatitis of the venenata sort, ask the patient about ocean swimming on the previous day—especially around rafts or boats! It may be the answer.

ORCHIDS TO PARKE, DAVIS & CO.

A Parke, Davis & Company advertisement in the most current issue (Feb. 3) of *Life*, Number 201 in their "See Your Doctor" series, carries a message of warning to over 22 million people regarding self-treatment with sulfonamides. Headed "Some things you should know about *sulfa*," it outlines in clear language the major reasons why self-medication with sulfa drugs is unwise and unsafe, and urges that the doctor be consulted instead.

Perhaps the medical profession ought to be undertaking this sort of health education on its own hook. At any rate, we can and should be grateful that it's being done, and done so well.

OCCUPATIONAL THERAPY OPENS DRIVE

For Recruits in Thirtieth Anniversary Year

Twenty thousand copies of an illustrated booklet, "Occupational Therapy, a Pioneering Profession," have just come off the press and are being distributed by the American Occupational Therapy Association to doctors, vocational counselors, educators, public health officials, rehabilitation agencies and many others in a campaign to build the ranks of trained occupational therapists with new recruits. This drive spearheads the thirtieth anniversary of the American Occupational Therapy Association. The official organization of professional therapists, which has worked since its foundation in 1917 to promote the profession by establishing standards of training and qualification, by engaging in research and by spreading information concerning the use of occupational therapy as an adjunct of medicine.

In February the new official publication of the American Occupational Therapy Association, "The American Journal of Occupational Therapy," made its debut, with six issues scheduled per year and subscriptions available to laymen as well as professionals.

Hawaii Medical Service Association

A NON-PROFIT ASSOCIATION PROVIDING MEDICAL AND HOSPITAL CARE

News Notes:

● Arrangements have been completed whereby Hawaii Territorial Medical Association members and their families may join the HMSA's "Hospitalization" Plan.

● The plan for medical care of plantation personnel is now in the committee stage . . . further developments will soon be forthcoming.

Serving and Conserving the Community Health

HILO HAWAII

H.M.S.A. HONOLULU

LIHUE KAUAI

BOOK REVIEWS

What is Heart Disease? By W. H. Gordon, M.D., F.A.C.P. Eleven line cuts. Pp. 114. Price $2.50. Grune & Stratton, New York, 1946.

Dr. Gordon has concentrated a considerable amount of well-organized material into one hundred pages. He begins with a few general considerations and the function of the normal heart. He then discusses methods of diagnosing heart diseases and places them in proper etiological categories. In the succeeding chapters he broadens his scope, discussing the different abnormal cardiac entities as to their symptoms, diagnoses, and treatment. All this is done in a very simplified manner, but he stresses the fact that each case must be treated individually. One of the best chapters in the book is the last one, which points out that many of the symptoms people think are due to heart disease may be due to some other cause, and only a physician is competent to determine this. There is also a brief summary of several types of diets at the end.

This book is an extremely good one for the physician to recommend to his patient because it is compact; the material is very clearly presented and is enhanced by the prolific use of clear diagrams. Whenever medical terminology is used, it is explained in lay terms so that there can be no question in the reader's mind as to the meaning. The cardiac patient is encouraged to accept a chronic disease as only a partial disability and not a complete physical handicap.

MORTON E. BERK, M.D.

Victory Over Pain. By Victor Robinson, M.D. Pp. 352, with 18 line cuts and 29 half-tone plates. Price $3.50. Henry Schuman, New York, 1946.

The new book *Victory Over Pain* by the well known medical writer and historian, Victor Robinson, is in a class unfortunately rare. Rare indeed are those books which can be read by both medical men and that mythical monster the intelligent layman. This book appears to have been designed for the layman but is exceptionally profitable reading for any member of the medical profession. For us in Hawaii who have recently had an introduction to the history of anesthesia given by Dr. Chauncey Leake at one of his best attended lectures, the book should be a fulfillment of the interest aroused at that time. Incidentally, the book gives credit to Dr. Leake for the discovery of divinyl ether; and a picture of him is published, proving that he was a very handsome young man.

As far as this writer knows (though his knowledge is very limited) a high standard of accuracy is maintained throughout. The book resolves itself quite simply and directly into a succession of short biographies garnished with interesting anecdotes and seasoned with the wit of the times. Thus a famous American medical man, Samuel Latham Mitchill, was known to the wits of his time as either a "living encyclopedia" or a "chaos of knowledge." The best commentary on the prolonged and nauseous controversy over whether Jackson or Morton discovered the anesthetic properties of ether is still that of Oliver Wendell Holmes "To e(i)ther."

We of the present generation are not wholly incapable of appreciating what surgery without anesthesia must have meant in the old days when it was the rule instead of the exception, as now. Anesthetic failures, especially with local block or spinal, are still common. The agonizing wails of patients can still be encountered occasionally. For a sensitive, poetic, brillant exposition of what surgery meant to the patient before the era of anesthesia every doctor should read the remarkable letter, received by Sir James Simpson from a medical colleague, George Wilson, as given in full in this volume. One paragraph may illustrate the exquisite style and feeling for words that characterizes this unusual letter.

"Of the agony it occasioned, I will say nothing. Suffering so great as I underwent cannot be expressed in words, and thus fortunately cannot be recalled. The particular pangs are now forgotten; but the black whirlwind of emotion, the horror of great darkness, and the sense of desertion by God and man, bordering close upon despair, which swept through my mind and overwhelmed my heart, I can never forget, however gladly I would do so. Only the wish to save others some of my sufferings make me deliberately recall and confess the anguish and humiliation of such a personal experience; nor can I find language more sober or familiar than that I have used to express feelings which, happily for us all, are too rare as matters of general experience to have been shaped into household words."

Finally, the reviewer cannot leave the book without being thankful for the name of "Mrs.

Thankful Colton," nor without remembering "Mrs. Remember Morton," two of the more picturesque maternal grandparents of anesthesia.

R. N. PERLSTEIN, M.D.

Mongolism and Cretinism. A Study of the Clinical Manifestations and the General Pathology of Pituitary and Thyroid Deficiency. By Clemens E. Benda, M.D. Pp. 310, with 101 illustrations. Price $6.50. Grune & Stratton, New York, 1946.

In presenting the results of ten years of research concerning mongolism and cretinism, this book probably represents the most authoritative and comprehensive material available on mongolism. This condition apparently occurs in two or three births in each thousand. It is said to be ten times as frequent as cretinism. Convincing evidence is presented to indicate that mongolism is fetal hypopituitarism. Fetal hypothyroidism results in cretinism, while hypopituitarism acquired after birth produces dwarfs and hypothyroidism acquired after birth produces infantile myxoedema. Mongolism is usually related to maternal endocrinopathy, or hormonal deficiency in the corpus luteum or placenta. The x-ray and physical characteristics of mongolism are described in sufficient detail to make more accurate and earlier diagnosis possible. Some useful treatment procedures are outlined. This book could well serve as reference to those confronted with suspected or known cases of mongolism and cretinism.

W. M. SHANAHAN, M.D.

A Guide for the Tuberculous Patient. By G. S. Erwin, M.D. American edition revised and edited by Henry C. Sweany, M.D. Pp. 122. Price $1.50. Grune & Stratton, New York, 1946.

Recovery from tuberculosis is dependent to a high degree upon the intelligent cooperation of the patient and accordingly, the tuberculosis physician must "teach" as well as "heal." Of great assistance to the physician is a manual such as this which provides the patient with basic information regarding his disease and its treatment.

Dr. Erwin, the author of this little volume, is the Medical Superintendent of the Liverpool Sanatorium, Cheshire, England. His book, written in a simple clear style, is a welcome addition to the meager list of up-to-date books on tuberculosis for the layman. Although there are chapters devoted to etiology, symptoms, diagnosis and the public health aspects of the disease, the major portion, properly, deals with treatment and after care. The importance of sanatorium treatment and the principles of the "rest regime" are adequately stressed. Brief descriptions of modern collapse procedures are given. Exception may be taken to the author's opinions in some instances regarding the application of certain procedures. It can be readily appreciated however, that a book of this nature unavoidably contains debatable statements without detracting significantly from the value of the work as a whole.

Dr. Sweany has made a valuable contribution by editing and revising the book for use in this country. For the most part he has substituted the American principles and methods when they differ, although a few English customs were retained which will necessitate a word of explanation to our patients; for example, "The good habit of spitting into a special blue bottle" and the mention of "bowling" as a permissible recreation.

The book as a whole is thoroughly sound and can be recommended as a valuable guide for patients.

H. H. WALKER, M.D.

The Challenge of Polio. By Roland H. Berg. Pp. 208. Price $2.50. The Dial Press, New York, 1946.

This short work written by a journalist who has worked somewhat around the fringes of medicine gives a very good, readable, historical account of the development of poliomyelitis as a disease entity up to about 1930. This constitutes about three-quarters of the book.

The final quarter of the book deals with recent developments and seems to be filled with gross inaccuracies and exaggerations quite in keeping with most popular writings by laymen on medical subjects, who forget that an adjective is a modifying word, not a magnifying one. The use of the magnifying adjective is for dramatic effect and tends to raise either bogeys or hopes in the mind of the inexperienced layman.

The chapter "Is Crippling Necessary" is filled with misleading statements in the form of half truths.

His chapter on "Promise of the Future" shows errors, chiefly in chronology.

With these red flags out the book may be read with safety and pleasure.

STEELE F. STEWART, M.D.

Hawaii's Japanese. An Experiment in Democracy. By Andrew W. Lind, Ph.D. Pp. 258, with 17 illustrations. Price $3.00. Princeton University Press, Princeton, N. J., 1946.

Hawaii's Japanese is a clear-cut analytical book of 258 pages. No occidental can read it without having a clearer concept of the workings of the so-called inscrutable Japanese mind. It treats in logical sequence of the early Japanese migrants to Hawaii, and of the problems of ad-

justment in the earlier days to conditions obtaining in the Hawaiian monarchy, provisional government, and still later under the American flag. Behavior of these people and of their children in the years before and during World War II are studied. A discussion centering on the role of Hawaii Japanese in the post-war world concludes the book.

It is an unbiased book which deals thoroughly with the faults as well as good points of the ethnic group under study. It is inconceivable that the book could offend either the most rabid of race baiters, or the well-meaning but sometimes misguided individual who can see no fault in anyone. In short, it is a clear step-by-step study of the extremely varied pattern of behavior of the Japanese aliens and citizens in Hawaii under various conditions of stress and strain. Many a question can be readily answered by reading the book, and no one can afford not to know the book and its contents.

H. E. Bowles, M.D.

Anesthesia Centennial Number, Journal of the History of Medicine and Allied Sciences. October 1946, Volume 1, Number 4. Illustrated. Price $2.50. Pp. 710. Henry Schuman, New York.

This volume is a compilation of articles on the history of anesthesiology. Each article is written by a different author and has a different subject. Due to this, it is impossible to review the book as a whole, so a brief discussion of each article is presented.

Josiah Charles Trent, in his opening article, sets the stage with a realistic description of surgery before the discovery of anesthesia. He takes us back to the dark ages of surgery, when a patient, strapped to a cross-bar, yelled in agony while an unskilled surgeon amputated a limb. Pain, horror, and suffering beyond description surrounded even the most simple operative procedures. Doctor Trent then proceeds to tell us of the day of days when on October 6, 1846, Doctor Morton gave his epoch-making demonstration at the Massachusetts General Hospital. Without going into the controversy of "who was first," Doctor Trent gives an account of the tottering steps of anesthesia in its infancy, and of its great strides under the guidance of the scientists of today. He reminds us of morphine and Serturner, of cocaine and Gaedicke, of Koller, Corning and Bier, of procaine and Einhorn, barbiturates and Fisher, ethylene and Luckhardt, cyclopropane and Lucas; in our own span of life, of Gwathmey, McMechan, Waters, Guedel, Adriani and Lundy; and of endotracheal technique, continuous spinal, "positive pressure," endobronchial technique, the "closed system"—the passing parade of man's fight against pain.

Doctor J. K. Tallmadge, in his article "Some Anesthetics of Antiquity," describes the futile efforts of men of centuries gone by, in their fight against pain. The use of opium, hyoscyamus, mandragora, and other drugs is described.

In his article, "Episodes in the History of Anesthesia," Doctor Emmett F. Horine tells of the introduction of ether by Morton and the introduction of new methods of administration from the "Morgan Inhaler" to the "Carbon Dioxide Absorption" and the "controlled respiration" techniques of today.

Mesmerism—magic word of the early 19th century—is beautifully discussed by Doctor G. Rosen. In his excellent article, "Mesmerism and Surgery," he describes the introduction of mesmerism into the field of surgery by Cloquet. Doctor Jules Cloquet, a French surgeon, performed a mastectomy on a mesmerized patient on April 12, 1829. The introduction of mesmerism into English surgery by Chenevix is discussed. The rise and fall of the mesmeric movement in England is presented, as well as the story of the lives of its two great apostles, Elliotson and Esdaile. Elliotson's stormy career and crusade for the use of mesmerism is told in detail. The work done by Esdaile in India, with a report of 74 operations performed on mesmerized patients, is included in this article. Mesmerism never gained a stronghold in American surgery because the height of its popularity coincided with the introduction of ether by Morton. In the words of Liston, "This Yankee dodge [ether] beats mesmerism hollow."

An article by Thomas E. Keys, "John Snow, M.D., Anesthetist," is devoted to the life and great accomplishments of Doctor Snow. In it we see John Snow the scientist, the clinician, the man. The painstaking clinical observations of Snow are brought forth, as well as his great personal integrity. His work on the "stages" of general anesthesia, his research on ether and chloroform, his search for a better method of administration, are recalled to us. His accurate concept of the dangers and pitfalls of anesthesia is set forth in the remark he made almost a hundred years ago: "The greatest danger of anesthesia is its administration by incompetent hands, by people who, when asked the composition of chloroform would reply, that it was smelling stuff." How true that is of some of the so-called anesthetists of today!

In a short article Doctor C. E. Heaton traces obstetrical anesthesia from the days of Queen Vic-

toria to the complicated techniques used by anesthesiologists of today.

Doctor Leake in an excellent article on the pharmacology of anesthesia tells of the great strides taken by anesthesia since the "hit-or-miss" days of the last century. He emphasizes the importance of a thorough knowledge of pharmacology in its relation to successful anesthesia. He pays tribute to the pioneers of scientific anesthesia—Guedel, Beecher, Waters, Adriani, Lundy—and to the results achieved by their untiring efforts.

In his article, "The Evolution of Endotracheal Anesthesia," Noel Gillespie presents a detailed description of the advancement of this technique through the years. He describes its progress from the crude method of Macewen (1880) to the highly complicated endobronchial technique used by anesthesiologists of today. Although this technique is well established, Doctor Gillespie very wisely reminds us of the great danger of allowing untrained physicians to use it.

Doctor Ralph M. Waters presents an excellent article on the "Development of Anesthesiology in the United States." He discusses the work done by Gwathmey and McMechan in the organization of anesthesiology as a specialty. He traces the development of anesthesiology from the dark days when it was in the hands of the office nurse to the science of today under well-trained physicians. One realizes through reading this article how young the specialty of anesthesiology actually is. In his span of life Doctor Waters has seen it grow from "the nurse and interne" stage to a full-fledged specialty. Today anesthesiology has its own Certification Board, which demands a well-planned five year postgraduate period of study and practice for physicians wishing to qualify. With his customary modesty Doctor Waters omitted any mention of his own great contributions which have played such an important role in the development of anesthesia.

Doctor Raymond Neven in the article, "The Introduction of Surgical Anesthesia in France," describes the efforts of French surgeons in introducing general anesthesia in surgical practice. He warned in the words of Malgaigne that anesthesia, "should be used only by experienced persons and never be entrusted to the careless and untried hands."

Two articles, one by W. K. Frankel and one by R. J. Whitacre and A. P. Dumitru, trace the development of anesthesiology in Germany. The great pioneer work done by German surgeons is presented. Trendelenburg devised endotracheal administration of ether through a thracheotomy. Kuhn devised a flexible metal tube for oro-tracheal intubation. Koller introduced the topical use of cocaine, and Schleich, its local infiltration. Einhorn gave us procaine, and Bier, its use in intrathecal blocks. Donitz brought forth the use of vasoconstrictors in local anesthesia. Regional anesthesia—splanchnic, paravertebra, sacro-caudal, brachial, Geisserian ganglion blocks, etc., were introduced by Sellheim, Kappis, Braun, Cathelin and Lawen. Regional anesthesia progressed by leaps and bounds in the early days of the 20th century under the leadership of these great surgeons. In 1902, Fisher discovered the barbiturates, opening the gates to intravenous anesthesia. Von Steinbuchel introduced the use of "twilight sleep" (morphia-scopolamine mixture).

The other articles in the book concern themselves with the history of anesthesiology in Sweden, Spain, Portugal, Cuba, Ecuador, Guatemala, Venezuela, Turkey and China. They all deal with the efforts of pioneers to introduce general anesthesia and describe the first administrations of ether in these countries.

The book, with its variety of subjects is highly interesting. The topics are skillfully blended into a pleasing pattern by their common link—the metamorphosis of anesthesiology throughout the world.

The book presents a vivid account of the fight of all races against pain, and should the book need a theme it might very well be: "Divinum est opus sedare dolorem."

R. A. Roman-Vega, M.D.

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RECENT ACQUISITIONS

Bacteriology and Infectious Diseases

American Association for the Advancement of Science *Aerobiology.* c1942.
American Association for the Advancement of Science *A Symposium on human malaria.* c1941.
American Association for the Advancement of Science *A symposium on relapsing fever in the Americas.* c1942.
Bispham, W. N. *Malaria; its diagnosis, treatment and prophylaxis.* c1944.
Burnet, F. M. *Virus as organism.* c1945.
Craig, C. F. *Laboratory diagnosis of protozoan diseases.* c1942.
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Russell, P. F. *Practical malariology.* c1946.

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Wood, H. C. *Dispensatory of the U. S. of America,* 23rd ed. c1943.

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We are pleased to report that each month shows an increase in both attendance and circulation statistics. This may be due, in part, to the acquisition of new books and journals, but we hope it may also be a permanent indication that doctors and nurses are becoming aware of the services available at the Library by telephone or personal inquiry.

Unfortunately, it has been necessary to place stacks in the alcoves in the reading room to relieve, in some degree, the congestion on our book shelves. We regret that the appearance of the room must suffer by the placement of these stacks, but we feel that appearances are less important than the growth of the Library.

Dr. Chauncey Leake, whose visit last year we all remember with pleasure, wrote us that he is sending the Library a copy of Howard Raper's *Man against pain: The epic of anesthesia,* and reminding us that this is the centennial of ether and anesthesia. Another excellent book on this subject is *The history of surgical anesthesia* by Thomas E. Keys, which includes an interesting introductory essay by Dr. Leake.

After long consideration of various bookplate designs submitted by leading artists of the Territory, the Library Committee has chosen a sketch by Donald Campbell Hardman, noted for his water colors and etchings. The motif employed by Mr. Hardman is that of the Aesculapian serpent-staff entwined in a'pe leaves, and is reminiscent of the striking grillwork which decorates the entrance to the Mabel Smyth Building.

The Army Medical Library is now printing card entries for all books acquired by them. This series will be available for distribution, and the Library Committee is considering the advisability of securing these entries for our Library catalog.

During the war, the Army Medical Library provided free photoduplication and microfilm service to all doctors in the interest of medical research. They are now unable to continue this free service, and are making the nominal charge for microfilm of fifty cents per article in any single volume, and fifty cents for each ten pages for photoprint. The Medical Library will be glad to forward any requests of this nature for doctors requiring journal articles not available here.

COUNTY SOCIETY REPORTS

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was held at the Wilcox Memorial Hospital December 12, 1946 at 7:00 p.m. Members present were Drs. Wade, Liu, Depp, Kuhns, Wallis, Chisholm, Toney, Boyden, Cockett, Fujii, and Masunaga. Dr. Young was also present.

Minutes of the previous meeting were read and approved.

Dr. Wade discussed a few of the points of the Veterans' Medical Care plan of the H.M.S.A.

1. Veterans Administration normally authorizes out-patient care for veterans only in service-connected cases.

2. H.M.S.A. is to be billed for care of such service-connected disabilities.

3. Non-service-connected disabilities are not included under the plan.

4. Hospitalization is another matter, and H.M.S.A. has no contract covering hospitalized cases.

Dr. Wade participated in the joint meeting of the Honolulu County Medical Society's Board of Governors and the Council of the Hawaii Territorial Medical Association, and brought back this information. The 18 basic propositions of the Hospital Service Study Commission were given to this Society, to be kept strictly confidential. The outline of the plan of the Medical Economics Committee was presented to the members for action. Dr. Wallis made the motion to give our moral and financial support to this Medical Economics Committee program. It was seconded by Dr. Boyden and unanimously passed. A letter was to be written to Mrs. Bennett by the Secretary concerning the assessment.

Dr. Fujii was nominated to fill the vacancy left by Dr. Umaki in the Board of Directors of the K.M.S.A.

The regular monthly meeting of the Kauai County Medical Society was held at the Wilcox Memorial Hospital on January 8, 1947 at 7:00 p.m. Members present were Drs. Wade, Chisholm, Cockett, Fujii, Kuhns, and Masunaga. Dr. Young was also present.

Minutes of the last meeting were read and approved.

A communication from Mrs. Bennett pertaining to the special assessment was read.

Dr. Wade read the minutes of meeting of the Board of Governors of the Honolulu County Medical Society which contained details of the plan of the Hospital Service Study Commission.

EICHI MASUNAGA, M.D.
Secretary

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MAUI COUNTY MEDICAL SOCIETY

A dinner meeting of the Maui County Medical Society was held at the Nanikai Club at 6:30 p.m. January 29, 1947. Present were the following members and guests: Drs. Balfour, Sanders, Wilkinson, Izumi, Wong, Anderson, Dusendschon, Underwood, H. Kushi, E. Kushi, Kanda, Rothrock, Dunn, Shimokawa, Uhde, Fleming, St. Sure, Coe. Also present were a group of nurses representing the Board of Health and the different hospitals. Dr. Herbert E. Coe, plastic surgeon from Seattle, Washington, gave a very interesting talk on surgery in children.

Following the scientific meeting Dr. Homer Izumi, a member of the Public Relations and Medical Economics Committee of the Territorial Medical Association, gave an outline of the committee's organization and progress. He brought out the fact that the doctors of Hawaii are faced with a very grave problem—the threat of a compulsory sickness tax. The committee appointed by the Governor has completed a plan that is to be brought as a bill before the next Legislature. This plan is financed by a territorial payroll tax of 2½%.

The Maui County Medical Society has pledged its full support in a campaign to defeat this proposed plan. A motion was made and passed that each legislator of the County of Maui be contacted by a member of our society to point out to them the arguments against such a bill. A list of such contacts was drawn up. It was further suggested that any member of the society who knows of any person, political or otherwise, who would aid in the defeat of this bill, should contact such person or persons.

Dr. William Osmers' letter of resignation was read and accepted by the society. A motion was made, seconded and passed unanimously that Dr.

Osmers be made an honorary member of the society.

A committee consisting of Drs. St. Sure, Patterson and Balfour was appointed to work with the legislative committee; the purpose of this committee is to follow the progress and plan for a new central hospital.

The president was requested to appoint another committee to study and draw up a revised fee schedule for the Maui County Medical Society.

W. D. Balfour, M.D.
Secretary

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HAWAII COUNTY MEDICAL SOCIETY

A special meeting of the Hawaii County Medical Society was called to order by Dr. Theodore Oto, Treasurer, in the absence of both the president and vice-president, at 7:15 p.m. Dec. 13, 1946 in the Staff Room of the Hilo Memorial Hospital, to discuss and take action on the economics program which was outlined in the communications from the Honolulu County Medical Society and reported by Dr. L. L. Sexton, a Councillor to the Hawaii Territorial Medical Association from our Society. Those present were Drs. Bergin, Bernstein, Crawford, Leslie, Loo, Mizuire, Oto, Phillips, H. M. Sexton, L. L. Sexton, Tomoguchi, Yoshina, Yuen, Ireland, Wippermann, Fillmore, Slaten, West, M. L. Chang, P. Chock, and W. T. Chock.

Because this was of territory-wide interest, representatives of medical societies of the outer islands were invited to a joint meeting of the Board of Governors of the Honolulu County Medical Society and the Council of the Hawaii Territorial Medical Association on December 10, 1946 in Honolulu. Dr. L. L. Sexton, a member of the Council, represented our society. The office of medical economics will become part of the Hawaii Territorial Medical Association when this program is approved and adopted by all the county medical societies.

After some discussion, Dr. C. L. Phillips moved, seconded by Dr. West, that the Hawaii County Medical Society go on record approving and supporting the economics plan. Eighteen members voted in the affirmative while Dr. William Leslie took a negative stand. Neither Dr. H. D. Ireland nor Dr. R. P. Wipperman voted.

* * *

The 257th regular monthly meeting of the Hawaii County Medical Society was called to order by the President, Dr. Walter Seymour, in the dining room of the Hilo Hotel at 7:30 p.m. Jan. 2, 1947, following a dinner. Twenty-three members, one guest and four visitors were present. The secretary read the minutes of the two previous meetings which were accepted as read and ordered placed on file.

The chair introduced Dr. Tell Nelson, allergist of Honolulu, who was the guest speaker. He delivered a comprehensive address on "Diagnostic Pitfalls in Allergy" and gave a summary of the latest information on Benadryl and PBZ. Many questions were asked from the floor and much discussion followed.

Dr. L. L. Sexton moved that this Society go on record as highly approving the medical economics program as proposed by the Hawaii Territorial Medical Association. This was seconded by Dr. C. L. Phillips. Sixteen voted in favor of this motion and there was no dissenting vote cast.

Dr. Archie Orenstein next moved that the members of the Hawaii County Medical Society be assessed $75.00 per member for financing the medical economics program; and that the membership be notified in writing at least 15 days before the next regular meeting; and the members be instructed to vote by proxy if unable to attend the meeting. This was seconded by Dr. H. M. Sexton. Seventeen voted in the affirmative and one voted in the negative. The secretary was instructed to send notices by registered mail.

Dr. Walter Seymour introduced Dr. Gerundo, the new pathologist at the Hilo Memorial Hospital.

The Chair announced that the annual meeting will be held in Kona sometime in March.

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A special meeting was called to order by the president, Dr. Walter Seymour, at 8 p.m. Jan. 30, 1947 at the Hilo Yacht Club following a dinner. Members of the Hawaii County Dental Society and nurses were invited to the meeting.

Dr. Herbert E. Coe, plastic surgeon of Seattle, who was here under the auspices of the Bureau of Crippled Children, delivered a comprehensive talk on pediatric surgical emergencies. Much discussion followed.

Dr. F. J. Pinkerton, chairman of the Medical Economics Committee of the Territorial Medical Association, outlined the history of the Hospital Service Study Commission which was created and delegated by the last legislature to study the cost of hospital care of patients. This commission made recommendations to the coming legislature to enact legislation to give free medical care to patients. Dr. Pinkerton strongly urged the members to oppose such legislation since it was not in the best interest of public health. He stated that the

public relations program of the Territorial Medical Association would be handled by the firm of Smith, Mansfield and Cummins and that HMSA was employing a medical economist. At the Council meeting of the Terr. Medical Association held in Honolulu it was decided to support the public relations program by special assessment of $75.00 per member. Honolulu, Kauai, and Maui County Medical Society voted to support this program and our Hawaii County Medical Society, while highly approving the program, has not yet voted to support it financially.

Mr. Jay Ketchum, Director of the Michigan Medical Service Plan, next presented his views of why legislation of a compulsory medical insurance plan was harmful. He cited examples where such medical care plans were in practice and how disadvantageous such medical care was to both the medical profession and to the public. He urged us to fight such legislation. He stated that medical societies in the various states of the union were contributing $50.00 to $100.00 per member to finance the opposition to compulsory medical insurance plans.

Dr. Coe, who was instrumental in the development of the Blue Cross, a prepayment medical care program strongly urged us to do everything in our power to fight this coming legislation.

Much discussion ensued.

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The 258th regular monthly meeting was called to order by the President, Dr. Walter Seymour, at 7:26 p.m., February 6, 1947 in the Staff Room of the Hilo Memorial Hospital. The secretary read the minutes of the two previous meetings which were accepted and placed on file.

The following correspondence was read:

1. Letter of resignation of Dr. W. M. Bond due to illness. His resignation was accepted with regret.
2. Letter of Dr. Tell Nelson of Honolulu concerning his visit to our Society in January.
3. Invitation from Dr. T. D. Woo, secretary of Hawaii County Plantation Physicians' Association to a showing of motion pictures on Penicillin and the Use of Intocostrin in Poliomyelitis on February 15 at 7 p.m. at the Hilo Memorial Hospital Staff Room.
4. Correspondence from Miss Bess Hammer, Executive Secretary, Tuberculosis Society of Hawaii, concerning routine chest plate on all hospital admissions for tuberculosis case findings.
5. A circular letter from the American Medical Association on a resolution dealing with public relations.
6. Letter from Territorial Medical Association requesting papers for the scientific session of the annual meeting at Kauai.
7. Correspondence from Dr. Joseph Palma concerning American Academy of Pediatrics study of child health services.

For the scientific part of the program, Dr. George Tomoguchi read a paper on the etiology of hard of hearing among school children and the type of treatment. Dr. H. E. Crawford analyzed the types of cases he had seen in the past year and the respective treatment instituted.

Dr. L. L. Sexton gave a report of the meeting held in Honolulu on January 31 on the arguments against the compulsory medical insurance plan which was recommended by the Hospital Service Study Commission to the legislature.

The discussion on the motion made last month on the $75.00 assessment to finance medical economics and public relations program next took place. It was moved by Dr. Wipperman, seconded by Dr. Orenstein and carried that the balloting be by secret ballot by those casting the votes in person. Out of forty-four active members, twenty-seven ballots were cast in person and eleven by proxy. The result was that thirty-five voted in favor and three against the assessment. The motion passed with more than the required two-thirds of the membership.

After some discussion, Dr. L. L. Sexton moved that routine chest x-rays of all hospital admissions be taken with the approval of the attending physicians and the patients. This was carried.

Dr. Loo next moved that the Society defray the expenses of the councillor to the meeting of the council. The decision when to pay and when not to pay was left to the discretion of the President and the Secretary and the councillor. This was unanimously carried. Dr. Phillips moved that Dr. Sexton's expenses to the meeting in Honolulu held last week be reimbursed to the amount of $52.00. This was carried.

The chair read the resolution of the Honolulu County Medical Society disapproving the recommendations of the Hospital Service Study Commission. It was moved by Dr. Phillips, seconded by Dr. Leslie and carried that we approve this resolutio nand instruct the councillor to carry our sentiment to the meeting of the Honolulu County Medical Society on February 7 in Honolulu.

Dr. Wm. Bergin requested that a more suitable hour for the clinical pathological conference of the Hilo Memorial Hospital medical staff be arranged so that the country doctors may be able to attend.

Dr. Seymour announced that the annual meeting and the president's dinner will be held at Kona Tavern, Kainaliu, Kona on March 8. Everybody was invited to attend.

TERUO YOSHINA, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

A special meeting of the Honolulu County Medical Society was held Friday evening, January 31, 1947 in the Mabel Smyth Building. Dr. Bowles presided and there were 140 members present.

Dr. Nils P. Larsen, the medical member of the Hospital Service Study Commission, presented an interpretation of the compulsory sickness tax plan to be presented at the next session of the Territorial Legislature. He told how an appropriation was made by the 1945 Legislature to study the costs of hospital and medical care and burial insurance. The Governor appointed a committee of seven to study the situation and present recommendations. Burial insurance was found to be impractical, but the Commission recommended a plan to tax all incomes to pay for hospital care. Dr. Larsen described various details of the plan. He stated that he differed from the other Commission members in that he felt only catastrophic illness should be covered, whereas the report recommended striving toward *complete* medical coverage as its goal, and emphasized in three separate places that the present plan was only an initial "step" in that direction.

Mr. Jay Ketchum, executive director of the Michigan Medical Service voluntary plan, discussed national experiences which doctors have had with similar plans and patterns. Mr. Ketchum briefly described his experience as an actuary and his present position as director of the largest voluntary health system in the country. He pointed out serious fallacies in the compulsory plan and definite advantages of a voluntary system.

Dr. Bowles announced that he hoped every doctor would study the proposed plan carefully and be ready to discuss it at the Society's meeting the following week.

Dr. F. J. Pinkerton, chairman of the Medical Economics Committee, reported progress in organizing plans. He felt it was important that the doctors be honest, dignified and straight-thinking. He thanked Dr. Larsen for his report on the Commission's work and stated that the public was to be educated regarding the Hawaii Medical Service Association. The doctors, he said, must be educated in public relations. For that purpose and for the purpose of conducting an organized campaign to inform the public of the Medical Association's views, the firm of Smith, Mansfield and Cummins had been hired as experts.

Dr. Sexton and Dr. Dunn reported that Hawaii and Maui County Medical Societies were prepared to join in the educational program. Dr. Palma had gone to Kauai Medical Society to discuss the program.

* * *

On Friday evening, February 7, 1947, the monthly meeting of the Honolulu County Medical Society was held in the Mabel Smyth Building. Dr. Bowles presided and 157 members and guests were present.

Dr. Herbert E. Coe, chief of staff of the Seattle Children's Orthopedic Hospital, spoke on factors influencing the surgery of infants and children. Dr. Coe was brought to Hawaii by the Crippled Children's Bureau of the Board of Health.

Guests withdrew following Dr. Coe's talk. A preliminary writen ballot showed that 95 members voted in favor of the resolution opposing the report of the Hospital Service Study Commission, as presented by the Medical Economics Committee, and 4 against it, with 2 blank votes. The members proceeded to freely discuss the report of the Hospital Service Study Commission and the proposed Resolution. In a series of motions, each one discussed at length, the following resolution was unanimously adopted:

RESOLUTION

The doctors of the Honolulu County Medical Society wish to compliment the Governor's Commission on the accomplishment of a very difficult task. They appreciate that a great deal of valuable, factual information has been accumulated in attempting to relieve medical expense at its most difficult level. They have been cognizant for many years of rising costs of hospitalization and offer their services to the Legislature in solving this problem.

As a result of the deliberations at the meeting the Society voted to disapprove the recommendations of the Hospital Service Study Commission for the following reasons:

BE IT RESOLVED, that where legislation has been enacted embodying a compulsory sickness tax plan it has always resulted in:

1) lowering the quality of medical care to the public and stifling of professional initiative;
2) increasing very substantially its cost;
3) creating an administrative political bureaucracy which has tended to destroy personal freedom and public independence;
4) decreasing tremendously the efficiency of existing professional personnel by requiring additional multicopy reports and bureaucratic red tape wholly alien to the personal services of the physician to his patient; and
5) allowing Government intrusion into the most intimate and confidential of all personal relationships —that between physician and patient.

BE IT FURTHER RESOLVED, that the Honolulu County Medical Society unequivocally supports and upholds the Hawaii Medical Service voluntary insurance plans which have been in existence for more than ten years, and is in

favor of extension of these plans to more adequately care for catastrophic illnesses. Those plans can meet all of the recommendations, and more, of the Hospital Service Study Commission with the exception of *compulsion.*

AND BE IT FURTHER RESOLVED, that the Honolulu County Medical Society through every means within its power will vigorously promote the *voluntary* Health Insurance plans and otherwise inform the people, thus leaving the way clear for the public-at-large to assert its independence and moral dignity.

The chairman asked for a vote regarding the advisability of restricting the sale of firecrackers. A show of hands indicated that the majority of members present favored such restriction.

Dr. Pinkerton reported on the progress of the Medical Economics Committee, saying that a panel of doctors was being prepared, who would speak at clubs and organizations and over the radio. For the radio speakers, scripts would be prepared in advance, but the doctors could phrase the material in their own words. Volunteers for the speakers' panel were asked to meet on February 10. Dr. Pinkerton also announced that a meeting would be held on February 14 for the office staffs of all the doctors, in order that they might be well informed regarding the compulsory sickness tax.

A bill is being prepared for this session of the Legislature, said Dr. Pinkerton, requiring doctors to file accident reports within five days of the time the patient comes into the doctor's hands, or forfeit the amount of the doctor's bill. The actions of certain doctors had provoked this bill.

S. L. YEE, M. D.
Recording Secretary

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NOTES AND NEWS

Dr. W. B. Patterson and family have returned to Puunene, Maui, after spending a vacation on the mainland.

Dr. William Bertram Meister, Col., U. S. Army, retired, has been appointed director of the bureau of medical services of the Health Department. Serving 35 years in continuous active service in the army, Dr. Meister has been on duty in army general hospitals in Alaska, France and the Panama Canal Zone.

Dr. L. A. Honl, of Honolulu, formerly associated with Drs. Culpepper and Bailey, is now practicing in his new location at South Beretania Street.

Dr. William M. Shanahan, acting director of the mental hygiene division of the Health Department, resigned his position to go into full-time private practice. A luncheon honoring him was given by the bureau and division chiefs of the health department.

Dr. and Mrs. Clarence Chang, of 1958 Mott-Smith Drive, became parents of their second child, Lorin, born January 21 at Kapiolani Maternity Hospital. Dr. Chang is now sharing offices with Dr. Samuel Yee in Honolulu.

Dr. Herbert E. Coe, of Seattle, Wash., a specialist in pediatric surgery, came here as a guest of the Crippled Children's Division of the Territorial Board of Health. He was here for about a month to conduct clinics and present lectures.

After two years in the Army Medical Corps in France and Germany, Dr. K. S. Tom has returned to Hawaii and has been temporarily serving as resident physician at Kapiolani Maternity Hospital. He will later enter private practice in Honolulu.

Dr. Ernestine Kandel Hamre, who has been for two months in New York City, Chicago, and Minneapolis, Minn., where her husband, Dr. Christopher Hamre, is on the staff of the anatomy department at the university, recently returned home.

Dr. Robert Perlstein, assistant director of Leahi Hospital, left March 28 to join his family in Florida. He expects to return with them in August.

Dr. Philip M. Corboy, of Honolulu, has returned from Los Angeles where he attended a two weeks' post-graduate course in ophthalmology conducted by the Research Club of Los Angeles.

Dr. Richard W. You, announced his association with Dr. Fred K. Lam in a general practice of medicine and surgery.

On March first Dr. Wah Kai Chang resumed his full-time practice in obstetrics and gynecology with the Chang Clinic.

Dr. Donald W. Hewitt has returned from the mainland.

Dr. Allston Gourdin has resigned from his position as acting chief of the division of venereal diseases, Territorial Board of Health. He has returned to Hong Kong, where he practiced before the war.

Dr. Mildred E. Staley of Honolulu died in this city on February 4 at the age of 82.

Dr. Alvin V. Majoska and Miss S. Margaret Myers were married on February 15 at the Church of the Crossroads.

There are two new resident physicians at Kapiolani Maternity Hospital—Dr. Max H. Blend and Dr. William B. Simpson.

Dr. and Mrs. Frederick Alsup have returned from a mainland trip.

Dr. James T. S. Wong is the new Resident in Obstetrics at The Queen's Hospital. Dr. Wong has been a captain in the Army Medical Corps and went through the campaigns on Leyte, Okinawa and Ie Shima. He was born in Hilo, graduated from Jefferson Medical College and interned at Queen's. He has been awarded the Distinguished Service Medal and the Legion of Merit.

The latest additions to The Queen's Hospital internes are Dr. Calvin McKay of Salt Lake City, Utah, Dr. Carlos Madsen of Provo, Utah, Dr. Charles Rhead of Detroit, and Dr. Michael Azzato of Chicago.

Dr. Grover H. Batten is now assistant residence surgeon at Queen's.

Following damage to Puumaile Hospital in the recent storm about sixty patients were transferred to Waimano on Oahu, thirty to Kula Sanatorium, and eighty-five beds were put to use at the Naval Air Station Hospital in Hilo. Dr. George Williamson, who joined the staff in September, has moved to Honolulu to care for the patients transferred there. Dr. L. E. Alford joined the staff in November. The homes of Dr. Leslie and Dr. Williamson were severely damaged in the storm.

Dr. H. M. Patterson and family, of Olaa, Hawaii, have returned from a seven months' trip to the mainland. They made their headquarters in North Carolina with Dr. Patterson's mother. Dr. Patterson visited the principal medical centers in the east—Boston, New York, Cleveland and Philadelphia. He spent much of his time at Duke University and Bowman Gray College of Medicine, Wake Forest, North Carolina. He also spent some time with Dr. Dennen of New York Post Graduate Hospital. He was reviewing principally surgery, obstetrics and gynecology. In Cleveland he attended the Clinical Congress of the American College of Surgeons from December 16 to 30, at which time he was inducted as a Fellow. Meantime he was also able to enjoy a good vacation with a variety of sports and entertainment. Dr. Patterson has resumed his work in Olaa with Dr. Rodney West as his associate. On July 1 Dr. West will take over the work as head physician and Dr. Patterson will open an office in Honolulu.

Dr. George Ewing, intern from Queen's Hospital, has been with Dr. West at Olaa for two months.

Dr. Scorebrand, who has been assisting Dr. Bergin at Pepeekeo, has accepted a position at Kalaupapa, assisting Dr. Norman Sloan.

Dr. Patrick J. Lynam, recently discharged from the navy, is assisting Dr. Crawford pending the opening of his offices in Honolulu.

Dr. L. L. Sexton has been appointed chairman of the Health and Sanitation Committee of the Hilo Chamber of Commerce.

Dr. B. R. Rowen of New York has been assisting Dr. Fernandez at Laupahoehoe since Nov. 1, 1946.

STERILITY GROUP MEETS

The third annual convention of the American Society for the Study of Sterility will be held at the Hotel Strand, Atlantic City, New Jersey, on June 7 and 8, 1947, preceding the annual A.M.A. Convention. The general theme of the meetings will be that of attempting to disseminate to the physician treating marital infertility an overall picture of the latest advances in reproduction. The convention will include original papers, round table discussions, scientific exhibits, and personal demonstrations. Registration for the sessions is open to members of the medical and allied professions.

Additional information may be obtained from the secretary, Dr. John O. Haman, 490 Post Street, San Francisco 2, Calif.

EXTENSION COURSE FOR MEDICAL RECORD LIBRARIANS

To meet the shortage of trained medical record librarians a course has been designed to give in-service instruction in the field. This extension course is directed by the Education Board of the American Association of Medical Record Librarians and is conducted on a nation-wide basis. The in-service training of medical record librarians has been made possible by a grant of $22,000 from the National Foundation of Infantile Paralysis.

Anyone employed in hospital or clinic records, and administrators interested in a better understanding of the record department are eligible to attend. Persons previously so employed who desire to take a refresher course will be accepted.

It is hoped that the program can be carried on for at least two years. Since the $22,000 grant is not sufficient to maintain the course beyond the present schedule of 25 classes a tuition fee of $20 is charged. Any amount over actual expenses will be used for a correspondence course of continuing study for those persons who have had this training.

The class meets for five consecutive days. Students learn medical terminology, medical ethics and related subjects and how to use Standard Nomenclature of Disease and of Operations. They have practice periods and lectures additionally.

Twelve courses have been held in areas along the eastern coast. Future meetings are scheduled for Los Angeles, February 24-28; San Francisco, March 3-7; Portland, Oregon, March 10-14; Seattle, March 17-21; Omaha, March 24-28; Birmingham, April 14-18; Indianapolis, April 28-May 2; Detroit, May 12-16; Cleveland, May 19-23; Minneapolis, May 26-30 and Boston, June 9-13.

In addition to the in-service training grant, the National Foundation of Infantile Paralysis has given $61,000 for scholarships to train new personnel as medical record librarians.

CALLING ATTENTION TO

Items of possible interest to friends of Chauncey D. Leake

January, 1947

1. New Books. *The United States Quarterly Book List* (Library of Congress, $1.75 per volume from Supt. Documents, U. S. Gov. Printing Office, Washington 25) offers selected pertinent review with biographical data. Sir Charles Sherrington is keen as ever in *The Endeavor of Jean Fernel* (MacMillan, N. Y., '46, $3.50). L. I. Dublin and A. J. Lotka revise important *Money Value of a Man* (Ronald Press, N. Y., 205 pp., '46, $6.00). J. Dobson offers useful *Anatomical Eponyms* (Bailliere, London, '46, 249 pp., $7.00). W. Klyne is-

sues a *Practical Chemistry for Medical Students* with fundamental scientific orientation (Livingstone, Edinburgh, '46, 474 pp., $5.00). W. S. Craig documents well in *Child and Adolescent Life in Health and Disease: A Study in (Britsh) Social Pediatrics* (Livingstone, Edinburgh, '46, 683 pp., $6.00). T. Reik presents *Ritual Psychoanalytic Studies* (Farrar Straus, N. Y., '46, $5.00). J. P. Baxter gives official story of OSRD in *Scientists Against Time* (Little Brown, Boston, 488 pp., $5.00). J. P. Greenstein announces important *Biochemistry of Cancer* (Academic Press, N. Y., '47, $7.00). G. Pincus edits *Recent Progress in Hormone Research* (Academic Press, N. Y., '47, 400 pp., $7.00). J. Barcroft summarizes *Researches on Pre-Natal Life* (Blackwell's, Oxford, '46, $9.00). R. Crawshay-Williams discusses *The Comforts of Unreason* (Blackwell's, Oxford, '46, $4.00). H. J. Eysenck describes *Dimensions of Personality* (Blackwell's, Oxford, '46, $6.00). Symposium appears on *Heredity and Variation in Microorganisms* (Cold Spring Harbor Biological Lab., N. Y., '46, 300 pp., $6.00). C. E. K. Mees reveals *The Path of Science* (Wiley, N. Y., '46, 240 pp., $3.00). New symposium appears on *Dental Caries and Fluorine* (AAAS, Washington, 119 pp., '46, $3.50). E. T. Engle edits *The Problem of Fertility* (Princeton, '46, 320 pp., $3.75). A. Magitot is stimulating in *Psysiologie Oculaire Clinique* (Masson, Paris, '46, 750 fr.)

2. Pharmacology: Curare gets well reviewed by E. B. Schlesinger (*Am. J. Med.* 1:518 '46) and by A. E. Bennett (Am. Scientist 34:424 '46). J. H. Comroe & Co. find di-isopropyl fluorophosphate (DFP) inferior to neostigmine in myasthenia gravis (*Am. J. Med. Sci.* 212:641 '46). C. Heymans & Co. report dibenzyl methylamine in diuretic and central stimulant (*Arch. Internat. Pharmaco. Therap.* 72:233 '46. D. I. Macht finds thromboplastic effects from digitalis and mercurial diuretics, offering possible explanation of sudden deaths in high dosage (*Ibid* p. 297). R. M. Suarex, A. D. Welch & Co. find conjugated pteroylglutamic (folic) acids increase urinary output of folic acid, which is further increased by folic acid free liver extract (*J. Lab. Clin. Med.* 31:1294 '46). R. K. Richards and G. M. Everett summarize data on tridione (*Ibid* p. 1330). J. Levy & Co. study effects of central stimulant and depressant drugs on brain slice respiration (*Bull. Soc. Chim. Biol.* 28:328 '46). E. B. Verney discusses absorption and excretion of water in relation to antidiuretic hormone (*Lancet* 2:744, 781, Nov. 23, 30 '46). T. S. Gardner finds daily ingestion of yeast nuclei acid prolongs average life span of mice (*J. Gerontol.* 1:445 '46), confirming T. B. Robertson (*Austral. J. Exp. Biol. Med.* 5:47 '28).

3. Chemotherapy: Excellent symposium on background to chemotherapy (*Brit. Med. Bull.* 4:241 '46) with history by E. M. Lourie, microbial antagonisms by H. W. Florey, antibacterial action by H. McIlwain, nutrition of bacteria by P. Fildes, microbial resistance by F. R. Selbie, chemotherapy of rickettsial and virus diseases by C. H. Andrews and H. King, local chemotherapy by L. P. Garrod, and principles of administration by J. H. Gaddum: also reviews of chemotherapy from Institute Pasteur Paris by the J. Trefouels, D. Bovet and F. Nitti. R. A. Peters, R. H. S. Thompson and L. A. Stocken report on mechanism of arsenic toxicity by interference with pyruvate oxidase systems with protection by dithiols (*Biochem. J.* 40:513 '46). R. H. Major reviews favorable results with nisulfasole in chronic ulcerative colitis (*Am. J. Med.* 1:485 '46). A. M. Fisher describes bacteriocidal penicillin action on bacterial morphology (*J. Bact.* 52:539 '46). G. W. Irving & Co. report fungicidal action of antibiotic tomatin (*Ibid.* p. 601). Excellent symposium on antibiotics including microbiological and pharmacological discussion by 20 contributors (*Ann. N. Y. Acad. Sci.* 48:31 '46). C. Levaditi & Co. propose liposoluble combination of 30,000 U methyl penicillin and 100 mgms. bismuth octyl ethylmalonate for effective syphilis therapy (*Presse Med.* 57:781, Nov. 23, '46).

4. Furthermore: G. M. Lyon discusses atomic energy and future health (*Milit. Surg.* 99:762 '46). L. Nanninga shows fibrinogen with molecular weight around 400,000 is no protease (*Arch. Neurl Physiol.* 27:241 '46). R. Jakowicz and L. M. Bryce find cerebrospinal fluid inhibits Rh agglutinins (*Med. J. Austral.* 2:740, Nov. 23, '46). H. Henry and M. Stacey show gram-positive or dye retaining constituent of cell in nucleoprotein (*Proc. Roy. Soc. B.* 133:391 '46). Our C. R. Allen and H. C. Slocum recommend anesthetic control with cyclopropane in Cesarean section (*Texas S. J. Med.* 42:482 '46).

February, 1947

1. More Books: Interesting biographies include: A. Flexner's *Daniel Coit Gilman, Creator of the American Type of University* (Harcourt, Brace, N. Y., '46, 182 pp., $2.00), S. Harris's *Banting's Miracle, the Story of the Discoverer of Insulin* (Lippincott, Phila., '46, 265 pp., $3.00) and J. A. Loman's *Adventures of a Ballad Hunter* (MacMillan, N. Y., '47, 309 pp., $3.75). Also A. H. Maloney's *Amber Gold* (Meador, Boston, '46, 448 pp., $2.50). H. Ward edits popular *New Worlds in Medicine* (McBride, N. Y., '46, 707 pp., $5.00). L. Bryson discusses *Science and Freedom* (Columbia Univ. Press, N. Y., '46, 251 pp., $2.75). G. Lawton offers *Aging Successfully* (Columbia Press, N. Y., '47, 266 pp., $2.75). C. Gruchy notes *Creative Old Age* (Counseling Center, San Francisco, '46, 143 pp., $2.75). M.F.A. Montagu reports on *Adolescent Sterility* (C. C. Thomas, Springfield, Ill., '46, 157 pp., $3.50). M. Luckiesh discusses *Applications of Germicidal, Erythemal and Infrared Energy* (Van Nostrand, N. Y., '46, 470 pp., $5.50). F. J. Hodges, I. Lampe and J. F. Holt offer useful *Radiology for Medical Students* (Year Book Publ., Chicago, '47, 411 pp., $6.75). E. H. Hashinger completes Logan Clendening's posthumous *Methods of Diagnosis* (Mosby, St. Louis, '47, 1064 pp., $10.00). J. E. M. Thomson's *Orthopedic Problems* appears (Edwards, Ann Arbor, '47, 234 pp., $6.00). R. A. Cooke offers *Allergy* (Saunders, Phila,, '47, 572 pp., $8.00). H. H. Horner surveys *Dental Education Today* (Univ. Chicago Press., '47, 454 pp., $6.00). L. Daniels, M. Williams, and C. Worthington describe *Muscle Testing* (Saunders, Phila., '47, 189 pp., $2.50). D. E. Lea notes *Actions of Radiation on Living Cells* (MacMillan, N. Y., '47, 311 pp., $4.00). E. D. P. de Robertis, W. W. Nowinski and Saez offer excellent *Citologia General* (El Ateneo, Buenos Aires, '46, $4.50).

2. Cancer: Russian symposium includes L. A. Silber on filtrability of tumors; A. D. Timofeyski on tumors in tissue culture; G. Roskin on toxin therapy of cancer and toxicity of blood in cancer, and cancerolytic substances of trypanosoma Cruzi, and A. Y. Altgauzen on diagnosis of malignancy from fresh smears (*Amer. Rev. Soviet Medicine* 4:100, '46). E. V. Cowdry proposes financing of cancer research (*Science* 105:53 Jan.

17, '47). A. R. Gopal-Ayenga and E. V. Cowdry report drop in desoxyribose nucleic acid in chromosomes after methylcholanthrene with marked rise when carcinoma develops (*Cancer Res.* 7:1 '47). C. Carruthers and V. Zuntzeft note increase in activity of succinic dehydrogenase and cytochrome oxidase in cancerous tissue (*Ibid* 9). See abstracts of '46 Gibson Island Conference on cancer (*Ibid p.* 37). F. R. Miller & Co. note remissions in lymphoblastic leukemia following injections of crude myelokentric acid from urine of chronic myeloid leukemia patients (*Blood* 2:15, '47).

3. Acetylcholine: E. J. Carey & Co. say that motor end plates in muscle seem to be biologic jet pumps to discharge acetylcholine into muscle myoplasm (*Amer. J. Path.* 22:1205, '46). C. S. Koschtojanz and T. M. Turpajew find -SH necessary for acetylcholine effects on heart (*Nature* 158:837, Dec. 7, '46). B. Minz (Paris) suggests that thiamin in cocarboxylase is factor in acetylcholine synthesis (*Proc. Soc. Exp. Biol. Med.* 63:280 '46). J. E. Davis finds that pteroyl glutamic acid increases cholinesterase activity of sera (*Ibid* p. 287).

4. Also: Nobelate H. J. Muller gives Pilgrim Trust Lecture on gene (*Proc. Roy. Soc. B.* 134:1, '47). J. A. Ryle well discusses meaning of normal *Lancet* 1:1, Jan. 4, '47). G. Ekehorn criticises H. W. Smith's renal kinetic theory (*Acta Med. Scand.* 124:282, 379; 125:148, '46). George Dock reminisces pleasantly on clinical pathology in the eighties and nineties (*Am. J. Clin. Path.* 16:671, '46). M. J Andre discusses oxygen apnoea as noted by A. Mosso (*Arch. Ital. Biol.* 41:138, 157, 1904; Presse Med. 69.815, Dec. 7, '46). A Leya describes marked antianaphylactic action of dimethylamino ethyl-benzylaniline HC1 ("antergan") (*Compt. Rend. Soc. Biol.* 140:191 '46). J. H. Lawrence & Co. note convulsive narcosis in mice from 60 per cent xenon in oxygen and give oil-water solubilities for inert gases (*J. Physiol.* 105:197, '46). See symposium on thyreotoxicosis (*Med. J. Austral.* 2:789, Dec. 7, '46). B. M. Bloomberg reports on absorption and excretion of p-amino benzoic acid (*S. Afr. J. Med. Sci.* 11:51, '46). E. Boyland notes acute convulsive effects from water reaction compounds of nitrogen mustards (*Brit. J. Pharmacol.* 1:247, '46). F. M. Berger and W. Bradley find powerful safe muscle relaxation from dihydroxy methyl phenoxy propane ("myanesin") (*Ibid.* p. 265). J. C. Trent's interesting biography of yellow fever runs through year's issues of *N. Carolina Med. J.* (7:22, etc., 654, '46). A Cournand analyses dynamics of pulmonary circulation (*Bull. N. Y. Acad. Med.* 23:27, '47). D. E. Lea and M. H. Salaman suggest that smaller bacteriophages are macromolecules like crystalline plant viruses while larger phages are primitive single celled organisms (*Proc. Roy Soc. B.* 133:434, '46). H. Fraenkel-Conrat & Co. find succinic ester of gramacidin active and nontoxic (*Proc. Soc. Exp. Biol. Med.* 63:302, '46). Our C. M. Pomerat & Co. describe toxicity of barbiturates on tissue cultures (*Ibid* p. 322).



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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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SYMPOSIUM ON MEDICAL RECORDS

The Record Librarian Association, Territory of Hawaii, organized in January, 1944, has as yet only a small membership, but among its numbers are several well experienced in this field. Even though several hospitals in the community have been approved by the American College of Surgeons as having met minimum requirements, some of the record librarians report that a good many of the records are of surprisingly low quality. It seems that many physicians on the hospital staffs fail to see the value of carefully written records. They feel they are too busy taking care of patients to take time to allay the worries of the librarian who has itemized the deficiencies of their records.

Since two major functions of the hospital are to provide care for the sick and injured and to educate doctors and others allied with the medical profession, medical record keeping assumes an important part in each instance. Medical records accurately kept not only improve care for the patient during a current illness, but also provide information for follow-up care, or for use in subsequent illness. Education of medical and allied professions is brought about by case and group studies of disease.

Moreover, should the hospital or physician become the defendant in legal action, their liability would depend upon the written record. Whether or not the record would substantiate the facts would depend upon the accuracy and completeness of its contents.

Record librarians have pledged themselves to the service of good record keeping. Members of the Territorial Association feel they have a fertile field in which to work here in the Islands. They are keenly interested in seeing progress in their own hospitals and they are seeking the interest and cooperation of all who contribute to making up the records.

The first three papers to follow were presented at the annual meeting of the Hospital Association of Hawaii in December 1946. While they were prepared primarily for hospital administrators, they cover material of interest and value to others in the medical field. The fourth paper was added to remind nurses that in the efficient discharge of their duties in the care of the sick and injured, the writing of good notes is not the least of their contribution.

V. Buchanan, R.N., R.R.L.

* * *

The Admitting Office and Its Relation to the Medical Record Department

Grace Gardiner, R.N., R.R.L.*

I have been asked to open the Medical Record Librarians' section of this meeting with a brief discussion of the importance of the admitting office and its relation to the medical records department. I shall speak on the essential sociological data of the record and the personnel of the admitting office.

The admitting office has often been called "the heart of the hospital." It is the patients' and relatives' first impression of the institution. Surely, then, there should be careful selection of the personnel of this department. The individual who conducts the admission interview should be experienced in meeting and handling the public,and familiar with hospital ethics. She should be aware of the importance of the data to be secured. Some knowledge of medical terminology, birth certificates and death certificates is desirable. Too frequently this department is staffed with clerks unfamiliar with hospital routine and hospital ethics, which leads to confusion and inefficiency, and at the same time exerts a distinct and bad psychological influence on the patients, relatives, friends, and personnel in other departments in the hospital.

* Medical Records Librarian, Kuakini Hospital.

Many business firms have found it advantageous to give their employees a course in "business etiquette." Would it not raise the standards of the hospital to install a course in "hospital etiquette"? It would seem most important that hospital personnel be skilled in the art of graciousness.

Securing the sociological section of the record, keeping a record of admissions, discharges, births and deaths are the duties of the admitting office. The utmost cooperation should exist between the admitting office and the medical record department in the interchange of information pertaining to these matters.

The identification sheet and the statistic card should show the full name of the patient and his or her address, telephone number, place of birth, nationality, age, date of birth, marital status, religion, occupation and Social Security number; the name, address and telephone number of the nearest relative or friend; the name of the attending physician and the intern assigned to the case; whether the patient is a readmission; the name of the patient's father and his place of birth; the maiden name of the mother and her place of birth; the name and address of employer; name and address of the party responsible for the account; the date and hour of admission and discharge; the number of the room to which the patient has been assigned; and the correct hospital number. If all of this information is secured on admission, it will not be necessary to approach the patient or relatives at a later date for further data. The admitting or provisional diagnosis should be secured from the attending physician in the admitting office. If this is not done, there is usually no admitting diagnosis recorded by any one. The patient should sign the statistic card on admission so that it will serve as a means of identifying his signature at a later date if necessary.

The number assigned the patient constitutes the patient's identification in all departments of the hospital. Sociological data become important to the patient who has no birth certificate and wishes to obtain a delayed birth certificate; and for the patient entitled to old age benefits who has no other means of proving his or her age. Addresses and telephone numbers of nearest relatives and friends are most essential in case of unfavorable course of the disease. Much of the data secured in the admitting office may he required for birth certificates, death certificates and insurance claims. Great care should be exercised in obtaining the correct spelling of names.

Previous admission to the hospital should be ascertained and noted in the sociological data so that the old record may be used by the physician for reference during the current hospitalization period.

In many hospitals the admitting office obtains the signature or signatures for permission to operate. It would seem that it should be the duty of the admitting officer to explain to the patient or the next of kin if the patient is unconscious, irresponsible, or a minor, just what he or she has been asked to sign. Too frequently the patient or next of kin is handed the permit and asked to sign with no explanation. The patient or responsible party is not given time to read the permit or is too confused to realize just what it is that he or she is signing.

In conclusion I should like to quote a short verse which appeared in the March 1946 issue of the *Journal of the American Association of Medical Record Librarians:*

WHAT'S IN A NAME?

"There is nothing in a name," they say,
Yet you would be surprised
How much of time we waste away
Until we realize
That Josephine is not plain Joe,
Or Frederika, Fred.
We hunt until we're all worn out
And really seeing red.
How can we know you're thinking Smith,
When you're writing Brown or Jones?
Though we've tracked many a baffling case,
That would have worried Sherlock Holmes.
So when you're making out reports,
Please keep the name the same,
Because, when filing records,
There *is* something in a name!

* * *

Hospital Lawsuits

MARJORIE LARSON, R.R.L.*

My subject pertains to the legal aspects of medical records. Most of the material in this paper has been taken from three lectures presented at an Institute for Hospital Administrators given at Stanford University. These lectures were written by Sister Patricia, Administrator of St. Mary's Hospital, Duluth; Dr. MacEachern of the American College of Surgeons; and Mr. Howard Burrell, Attorney, San Francisco. Since there is a limited amount of time in which to present this paper, common problems that frequently cause lawsuits have been selected.

Recently a doctor who had been in practice on the mainland stated that the hospitals of the Territory are wide open for shyster lawyers. While there have been few occasions for hospitals in the Territory to be bothered about lawsuits in the

* Formerly Medical Record Librarian, Kapiolani Maternity and Gynecological Hospital.

past, changing times and population might make it a policy of wisdom to follow the old adage that an ounce of prevention is worth a pound of cure.

In California a few years ago the decision in a case laid down the rule that a child could maintain an action for damages sustained both before and after the severing of the umbilical cord. Following that case a bill was pending before the California Legislature to remove the effect of the decision, but whether this was accomplished, I cannot say.

We know that medical records contain confidential and private information and are the property of the hospital, yet employees uninstructed in the matters of ethics and policy will give out such information indiscriminately. Medical records should be kept under lock and key and authority delegated to the record librarian regarding the type and amount of information that can be given from them.

An attorney or insurance representative does not have access to records unless he presents a signed statement of permission from the patient and the physician in charge of the case. It is essential that the hospital secure a specimen signature of the patient and the signature on the admission or statistics card is adequate. Records can be called to court on subpoena, but either the superintendent or the medical record librarian should accompany the record to court. It is usual for the librarian to do so.

X-ray films are part of the hospital record because the patient pays for the diagnosis but not the picture.

It is known that the signed consent of a patient must be obtained for an operative procedure. The consent, of course, should be signed before the patient has had any drugs, narcotics, or anesthetic, and the individual must be of sound mind. In a malpractice suit it appeared that the patient arrived at the hospital on the morning of the operation. Her signature was attached to the form for a consent of surgery, but the hospital chart did not show the time the consent was actually signed. It did show, however, that the patient was given medication shortly after arrival. That patient stated under oath that she did not sign anything before being given a sedative. As a result, the court ruled that her signature was not valid. It is also necessary that the patient be informed fully and truthfully what his consent covers.

"Abortions and sterilizations are legal when performed in connection with the treatment of a disease or preservation of health or life, but it is important that the consent of the patient and the need of the abortion or sterilization be definitely established, and all hospitals in such cases should require a consultation in writing between the patient's doctor and other staff doctors . . . This should be part of the medical record." The signature of the spouse should also be obtained. Damage suits have arisen in later years claiming fraud or illegality, but a hospital record containing the aforementioned information would remove any supposed basis for such a lawsuit.

A common cause of malpractice suits is the hotwater bottle burn. It is believed to be a good policy for hospitals to require that whenever a hotwater bottle is applied, a notation of the water temperature, as well as the patient's condition at that time, be placed on the chart.

Improper and inadequate identification of babies has been the cause of many lawsuits. Most hospitals require footprints and fingerprints of the newborn and sometimes the mother's finger prints. A hospital in California requires that when a mother is dismissed with her baby she sign for the baby to show that she has received her own child.

All doctors' orders should be in writing and if given over the phone should be signed at the first opportunity. There was a malpractice suit in which the doctor denied having given a certain order.

All facts should be recorded. Nurses often fail to chart doctors' visits. If a chart went to court and under examination was found to show no evidence that the doctor had visited, it would be assumed that he did not visit and therefore neglected his patient.

There have been suits against hospitals and physicians which involve the too-tight bandage and cast. I know of one case in which a two year old child had to have his arm amputated after the development of gangrene from a too-tight cast. The physician's insurance company paid the damages; the hospital was freed of blame because the nurse had recorded on the chart the color of the child's fingers and had called the doctor's attention to it.

Removal of drains and tubes or any foreign substances should be recorded. Occasionally a drain will come out with the dressing. In one lawsuit case the nurse failed to record the coming away of the drain with the dressing and that case progressed in court for days as to whether a drain had or had not been removed at a certain time.

Whoever is in charge of nursing service should be responsible for the proper kind of nurses' notes and also see that doctors write and sign their

orders. The hospital is frequently to blame for a nurses' carelessness.

Much too often charts fail to record matters which are considered routine. I shall quote from Mr. Burrell's paper: "As an example, as you all know well, in obstetrical cases the administration of ergot, pituitrin, or both, is done for patients in a routine manner. However, the fact that such procedure is routine and is customarily and ordinarily done makes it all the more necessary for the facts in respect thereto to be recorded. It is not enough for the nurse who is being cross-examined as to why a certain item of nursing treatment was not set down on the chart to say, 'Well, I know I did it because I always do it and that is why I didn't put it down.' As a matter of fact, lawyers hear this discouraging answer time after time."

There was a case of a patient who stated under oath that she had had breakfast before the administration of nitrous oxide–ether anesthesia and that she had aspirated some food while under this anesthesia, resulting in pneumonia and the lighting up of an old tuberculous condition. The chart did not show whether or not breakfast had been given and therefore the defense had no proof to dispute her statement. Another patient was being given an intravenous infusion following an operation. The nurse left the room and no one was in attendance. Somehow the needle came out of the vein and fluid flowed into the surrounding tissues. Later sloughing took place, a rather large depression resulted and the patient won her lawsuit against the hospital.

Valuables of patients should be listed and stored in the safe. If a patient wishes to retain them, there should be careful explanation that the hospital is not responsible. Lawsuits have arisen over petty thievery in hospitals.

Patients should not be released from the hospital without signed permission of the doctor. Technically the hospital is responsible for the patient from the time of entering the hospital until properly dismissed. A patient leaving the hospital without permission should sign a release stating that fact.

At one time I made inspection rounds with a representative of an insurance company who was obtaining information on which to base the insurance rate of a hospital. He checked on all wheelchairs, operating and delivery tables, guerneys. He advised that hallways and stairways inside and out be properly lighted and that rubber mats be placed on slippery concrete steps. This particular hospital was a two story stucco building and had no fire escape. Ramps had to be built from the second floor nursery to the ground and the doors had to swing from the inside out. The representative inspected for short circuits, looked at the x-ray machine, and other equipment such as gas machines, etc. We went through the kitchen, into the laundry, down into the basement, checked the boilers, up and down ramps to see if they were or could be slippery. In fact, he looked above, below, under and practically through everything. He quizzed me on medical records, whether or not blood counts and urinalyses had been taken on surgery cases, and many other things pertaining to the hospital records.

Most mainland hospitals are record conscious, many of them through the hard way: experience from lawsuits. Mr. Burrell stated that an improperly kept and slovenly chart can often be a source of more embarrassment to a hospital than no chart at all.

In conclusion I shall quote from Dr. MacEachern's paper: "While it is always desirable to avoid medicolegal complications, not infrequently they are inevitable. In most instances, the patient has little ground for legal action since the physician, surgeon, or hospital will settle out of court in those cases in which suit is justifiable. In many of the cases which do go to court, the physician or hospital is not at fault and the defense is strengthened materially by the medical record written at the time the alleged error occurred and with no thought of future suit. Hospitals or physicians who are lax in keeping proper medical records may find malpractice or medicolegal suits most difficult and embarrassing when called upon to testify in their own defense."

* * *

Responsibility of Hospital Personnel and Medical Staff in Securing a Complete Hospital Record

ANTONIA PECHACEK, R.R.L.*

A medical record is brought to the record room by the nurse who discharges the patient. The nurse may bring it with the thought "another chart for filing," which is all very true; but before the record was compiled it took the combined efforts of many departments in the hospital: admission, laboratory, x-ray, social service, dietary, nursing, surgery, administrative, internes, residents and the attending physician. Before a record is filed it often entails contacts with these various departments.

It is a happy record librarian who finds all the previous day's discharged records on her desk. If they are completely diagnosed and contain all

* Medical Record Librarian, Children's Hospital.

the component parts needed in each record she is, indeed, a lucky person. But this is where the day's work begins. She must first make certain that all the records on patients discharged on the previous day *are* on her desk, and if she finds that some are missing, it is necessary for her to contact the nursing supervisor who had charge of the patient.

As the record librarian checks through the records she must bear in mind what Dr. MacEachern says: that "when a medical record is completed it should contain sufficient data in sequence of events to justify the diagnosis and warrant the treatment and the end results."

Every effort is being made to improve the quality of the records here in the Territory, and to have everyone in the hospital record-conscious is one of the manifold duties of the record librarian. This is where it takes intelligent cooperation with the other departments of the staff. For instance, it is very important to have the nurses' notes signed by the nurse who makes the notation. Each hospital day must be accounted for on the graphic sheet, nurses' notes, and any other record kept by that department.

If some of the day's reports are accidentally misdated or not in the proper sequence, it is the duty of the record librarian to call the discrepancy to the attention of the floor supervisor who was responsible for the patient's record. If x-ray, surgery, or laboratory reports are not included in the record and they have been ordered by the attending physician, the respective departments must be contacted before the patient's record can be considered complete.

When all the component sheets are included, and if the record still lacks the diagnosis and the doctor's signature, the next worry of the record librarian is to have the doctor sign it. She may be fortunate enough to have him come into the office and offer to do it, or she may ask him to do so as he passes her door. He may heed her request or he may be too busy to do it that day. In which case she must think about "another incomplete record." It may be several days before she sees the doctor again and the end of the month may come and find the record still unsigned. This often necessitates a telephone call to the doctor's office and then again, more waiting. And unless all records are properly signed and each component part is in its proper order, the record would not be accepted in court where any record may be subpoenaed. As Edna Huffman says, "because each hospital patient is a potential court case careful recordings of the medical findings are of primary importance." It would be well indeed if every hospital employee could be cognizant of this possibility.

It is difficult to produce flawless work with poor tools and one of the first and essential needs is to have a record room so furnished that there is a comfortable place for the doctor to sit down while signing his records. A conveniently located table or desk, good pens, plenty of ink, an ashtray, and note paper are all essential. This is where the administrator enters into the picture, as he is the only one who can provide the necessary equipment. This, of course, also includes good tpewriters, suitable files of durable material, preferably steel with roller bearings rather than cheap transfer files; dictionaries; and proper lighting, as well as the little conveniences previously mentioned.

It is recommended that each attending physician keep progress notes and especially make a discharge note. There are many physicians who are very conscientious and cooperative in these matters; but then again there are others who need some coaxing, as one might say, and it is always the hope of a record librarian that her efforts are not in vain. It is really surprising and very encouraging how much a little so-called "coaxing" can do towards attaining this goal.

This will not happen in one day, one week or one month. It takes repeated efforts and persistent patience over a long period. When little improvements do take place, though they are gradual, the record librarian feels that her efforts are worthwhile and that she is doing what is expected of her by the administrator and other hospital personnel. Every conscientious worker in a hospital does want to do his part in keeping up the standards to comply at least with the minimum requirements outlined by the American Medical Association and the American College of Surgeons.

May I add here that it is advisable to have the record librarian talk to the student nurses and the graduate staff as well in order to explain many of the important details for proper charting of admission information, treatments given, the condition of the patient at the time of discharge, etc. It is here that a nurse's signature should be stressed.

Constructive criticism from other hospital departments is always welcome to any record librarian and often a little chat will straighten out difficulties which hinder the desired efficient and smooth relationship which is the envy of every hospital administrator.

Since the inception of the Association of Medical Record Librarians it has had the unqualified support of the American College of Surgeons,

American Medical Association and the American Hospital Association. May we add to this bulwark the support of our administrators!

The Importance of Nurses' Notes

Mildred Prosch, R.R.L.*

One of the primary responsibilities of the hospital in the proper care of the sick and injured is to provide accurate and adequate medical records and one of the important contributions to the record is the bedside notes of the nurse. "The patient's bedside record is a form of document, the content of which may not only aid in diagnosis of a specific disease, but may aid in the treatment of other diseases, and it is also of legal value." This summarizes the importance of the nurse's part in the compilation of the medical record.

Clinical recording requires accuracy, promptness in reporting developments, and careful itemization of services performed in carrying out the physician's orders for the welfare and comfort of the patient. Nurses are not constantly on duty during the day and night. One who has observed an important development may be off duty or attending another patient at the time of the physician's call, or she may forget about the observation entirely. This is why every important observation must be recorded at once, presupposing that the nurse has learned to differentiate between the important and unimportant. There is as much value in the elimination of unnecessary detail as in the inclusion of important and pertinent facts. Such statements as "morning care" and "a good night" have no meaning as compared with "slept all night" and whether the patient's sleep was quiet or undisturbed. As the name implies, the nurses report what has been done for the patient and what observations have been made. In most instances there is an unnecessary repetition of entries recorded elsewhere, thus wasting the nurse's time and the space which is required for recording her observations. Temperature, pulse, respiration, stools and urine are recorded on the graphic chart and ought not to be repeated on the nurses' notes.

Nurses' notes should be comprehensive, logical, accurate and legible. The physician is given valuable information by a trained observer. Upon the information recorded may depend the entire plan of treatment. If no written record of the patient's hour to hour progress were available, each person attending the patient would have to be told individually the details of the case. Verbal instructions tend to inaccuracies which might result in errors of medication or other treatment.

Because the doctor does rely upon nurses' notes for detail, his own are more concerned with specific problems and do not attempt to give a full picture of the patient's course. As a result, research men frequently find that if their interest does not coincide with that of the doctor writing the record, the nurses' notes furnish the only answers to some of their problems.

In medico-legal controversies her notes are of value as evidence of medical treatment and nursing care given and are proof that she has carried out the physician's instructions. They also serve as protection both to herself and to the physician.

* Medical Record Librarian, Queen's Hospital.

NURSES' ASSOCIATION CITY AND COUNTY OF HONOLULU

The following officers were elected at the Annual Meeting of the Nurses' Association, City and County of Honolulu, on January 6, 1947:

President: Laura Draper
Secretary: Teruko Sakakida
Treasurer: Esther Kekela
Trustees: Sister Walter Damien; Rosie K. Chang

Nurses frequently ask: "What do I get out of the Nurses' Association for the amount of dues I have to pay?" In looking through our files recently we came acros the ANA publication of 1925 entitled *What do I get out of the American Nurses' Association?* and we feel that it would be fitting to publish it at this time. We hope it will answer your question for you.

This question is a natural one for nurses considering membership in the American Nurses' Association, for an intelligent man or woman does not enter an organization blindly.

We may be living in an industrial age, but we are also in an organization period. The day of the individual is over in the United States and the world. The entrance of the trust into the business life of the country has attested this as do the far reaching organizations of employers and workers and the common use of such terms as collective bargaining and trade agreements. Men engaged in commerce; grocers, dry goods merchants, bakers, florists, all have formed organizations, for they discovered they could gain help in discussion of their problems, and they found there was strength in numbers.

If this is true of the commercial world how much more is it true of the professional? Doctors, lawyers, engineers, nurses have banded themselves together in great associations to maintain ideals and to keep in touch with the advances made in

the technique of the profession. Living in scattered communities, facing diverse problems, the men and women might otherwise lose sight of the aims and achievements of their professions.

A trained nurse is a member of one of the greatest professions, and she may well be proud of the one she has chosen. She not only has great traditions to follow, but she must be conversant with the advances made in the technique of medicine and nursing.

First of all, by joining the American Nurses' Association the nurse establishes herself. She has joined a profession, and has aligned herself with the members of it. Before she takes this step, she is like a spectator at a football game who watches the players and cheers at intervals but takes no part in the contest. Membership is moving from the sidelines to the center of the field where there is concerted action and fine teamwork. The young nurse will advance shoulder to shoulder with veterans anxious to aid her and to strengthen the service of the nursing profession. She will find herself professionally conscious in the best sense, cognizant of her opportunities, aware of her obligations to her colleagues and to society.

The association protects her from competition with those not qualified to care for the sick, by fostering the enactment of laws on registration of nurses. If the nurse moves from state to state, the American Nurses' Association, by giving her a transfer card, enables her to establish herself with ease in the new city, with no loss of membership privileges.

Through the collection of information on state and national laws pertaining to nursing, the association acquaints her with the regulations in the various states. A keen watch is kept on all legislation pertaining to nurses, so that the interests of the profession may be protected.

Advances made in health work, achievements of individual nurses, medical discoveries, studies to be made of the work of nurses, the grading of schools, nursing programs in other countries; all these are brought before the nurse to enable her to be an intelligent member of her profession.

The American Nurses' Association brings the nurse in touch with nurses in other states and countries. If she wants to travel, she has the benefit of letters of introduction to the members of her profession in whatever country she goes. Nursing owes its greatness as a profession to the fact that its chief tenet is service. The individual nurse is of great use in the world, but the member of an organization is of far greater service. *For a nurse to remain isolated is like sending soldiers one by one into battle. It is through the organization of armies that victory is achieved.*

To the nurse just graduating, affiliation with her state association is one of the best steps she can take. To the nurse in active practice, membership in the great organization will open up immeasurably greater fields of service and development.

The American Nurses' Association has grown out of the needs of the individual nurse. It would never have been started, nor would it have continued for 25 years, had there not been a necessity for it.

In the past quarter of a century the achievements of the American Nurses' Association have been noteworthy. One of the greatest public contributions of the national organization has been the legislative work in 48 states which now have laws of registration for nurses for the protection of the public. By the enactment of laws, the practice of nursing has been regulated, and the public guaranteed better nursing service, both in disease prevention and in the care of the sick.

The American Journal of Nursing, the largest and most influential magazine in the world devoted to nursing, is another noteworthy contribution of the American Nurses' Association. It has been a potent force in raising the standards of the profession, and in informing its members on matters of technical and general interest.

What the individual nurse gets out of the association will depend upon what she puts into it. If she is like the Irishman who hung a copy of the Lord's prayer on his wall, then waved his hand toward it night and morning, saying, "Them is my sentiments," she must not expect too much to come from her membership. The indolent Irishman thought he was praying, but he wasn't.

Women who have tried the efficacy of membership in the American Nurses' Association say it is cumulative in its value. The nurse who becomes a member of the American Nurses' Association will receive big dividends from her investment.

Miss Michiko Kikugawa, R.N., daughter of Mr. and Mrs. Shitoku Kikugawa of Wahiawa, graduate of Leilehua High School and Kuakini General Hospital School of Nursing, Class of 1944, recently left for Cornell–New York Hospital, New York City, to do post-graduate study in obstetrical nursing. Miss Kikugawa was on the general duty staff at Kuakini Hospital before leaving for New York City.

KAUAI NURSES' ASSOCIATION

The following officers of the Kauai Nurses' Association were elected in January 1947.

President: Mrs. Claire Carra, Koloa
First Vice President: Miss Dorothy Teall, Lihue
Second Vice President: Miss Willa Shell, Kilauea
Secretary: Miss Elvie Manley, Wilcox Hospital, Lihue
Treasurer: Mrs. Miyoko Masunaga, Kealia
Directors: Miss Mabel I. Wilcox, Lihue
Miss Thelma Hensley, Kealia

* * *

HAWAII COUNTY NURSES' ASSOCIATION

MARY E. STANLEY, R.N.*

1946 was a hectic year for the Big Island Nurses' Association. In September our President, Miss Josephine Hall, left by clipper for the east coast to attend the biennial meeting of the American Nurses' Association in Atlantic City, N. J. Her mainland visit will keep her away until January. Mrs. Kahiwa Lee, Vice-President, resigned from the association in September to move to Honolulu permanently and is now director of Cluett House, the Episcopal home for business and university women. Miss Jettie Jacobson, elected vice-president in October, had to assume the duties of President until the annual election in January.

During the year the Association meetings were held as luncheons at the Hilo Hotel except for the December meeting which was held as a Christmas party at the Puumaile Hospital Nurses' Cottage. There were thirty members and guests present. At this meeting interesting and profitable discussions were held on the subjects of world peace and unions. Each member of the Association sent a Christmas package to Mrs. Soledad Buenafe in Manila for the benefit of nurses in the Philippine Islands. The Association also purchased the usual $15 Tuberculosis Association Bond.

* Staff Nurse, Puumaile Hospital.

Miss Jean MacDonald returned to her position with the Board of Health late in the year after six months' vacation on the mainland. She gave interesting reports about the fresh fruit in the northwest and made us wonder why apples should rot on the ground there while we pay 15 cents apiece for them here.

Miss Annette Hammersland, plantation nurse for Hilo Sugar Company, returned from the mainland in November. She reported that even with strikes and high prices, Hawaii is preferable to the mainland.

Miss Helen Graffrath of Manhattan, New York, was guest of honor at a chicken hekka dinner given at Hilo Memorial Hospital Nurses' Cottage and received many lovely gifts. She was married to Mr. Edward Rosehill of Hilo on November 12, 1946.

Miss Evelyn Plettner of the Puumaile Hospital staff left for her home in Sutton, Nebraska on December 8. She was a member of the staff during the past year, and although she does not expect to return to the Islands, we sincerely hope she will.

Miss E. H. Middleton, on vacation from Wilcox Memorial Hospital in Lihue, spent a week in Hilo as a guest of Mrs. Dorothy Moll. She returned to Kauai by way of Honolulu in order to attend the Hospital Association meeting in December.

Miss Laura DeShazo, Superintendent of Nurses at Pahala Hospital, attended the Hospital Association meetings.

New officers of the Hawaii County Nurses' Association elected in January 1947 are:

President: Miss Jettie Jacobson
Vice-President: Miss Roberta Lindberg
Secretary: Miss Bess Hammer
Treasurer: Miss Hideko Kagimoto
Board of Trustees: Miss Mary Jean MacDonald, Mrs. Mae Marcallino, Miss Josephine Hall

NURSES' ACCOUNT AT THE BLOOD BANK OF HAWAII

The Service Committee submits the following plan for opening an account at the Blood Bank. Members of the Territory of Hawaii Nurses' Association who are in good standing will be eligible. Nurses who can meet the requirements of the Blood Bank will be asked to become donors. Under this plan, nurse patients who receive the blood will only pay the current $7.50 service charge, instead of the whole fee of $50.00. There will be a small express fee for blood sent to patients on outside islands. Nurses on all islands will benefit by this plan.

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Chairman, Service Committee

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*Int. Abst. of Surgery 83:1-12, July 1946.

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**Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154.*
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60.

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George Q. Cannon
Manager, Milk Division

P.S. Whipping cream will be available only as we can procure shipments from the Mainland.



They wouldn't be dry goods to *Grandmother*



"NYLON . . . PLIOFILM . . . LASTEX"—they wouldn't be dry goods to Grandmother! To her, "dry goods" meant yard goods—cottons, silk and wool, and notions—huttons, needles and thread, whalebone stays, strawberry pincushions . . .

Life was simple in those days—simple but not easy. There were few "finished" goods. It was often up to Grandmother to make the things she and her family needed.

That was before competition had worked its numerous transformations in trade. They have vastly increased the number of different products, filling wants that never could have been satisfied a few generations ago.

As a result, the Dry Goods Department of the Davies Company, one of the largest wholesale concerns in the country, includes thousands of articles unknown in Grandmother's day. Synthetics, such as nylon and rayon . . . plastics, such as pliofilm shower curtains and raincoats . . . sundries, such as zippers, grippers and lastex, are words in a vocahulary that Grandmother never knew.

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GOLD THERAPY in Rheumatoid Arthritis

THE consensus of clinicians who have had considerable experience with aurotherapy is that gold, despite its recognized toxicity, is the most effective agent available for the treatment of active rheumatoid arthritis.

The following statements, quoted from the article entitled, "The Use And Abuse Of Gold Therapy In Rheumatoid Arthritis", by Bernard I. Comroe, M. D. (*J.A.M.A.* **128**:848-851, July 21, 1945), constitute an excellent summary of the present position of gold therapy in arthritis:

1. Gold is of no value in any form of joint disease except rheumatoid arthritis.
2. Gold does not benefit all patients with rheumatoid arthritis.
3. Gold is not the final answer to the treatment of rheumatoid arthritis.
4. Toxic symptoms may appear at any time during this form of therapy.
5. From 10 to 20 per cent or more of patients who have received gold therapy relapse after stopping the drug.
6. Extreme care must be used during gold therapy, and the physician must be familiar with the details of such treatment before undertaking this.
7. Injections of certain gold salts in proper dosage may be followed by subjective and objective evidence of improvement in the majority of selected patients with rheumatoid arthritis.

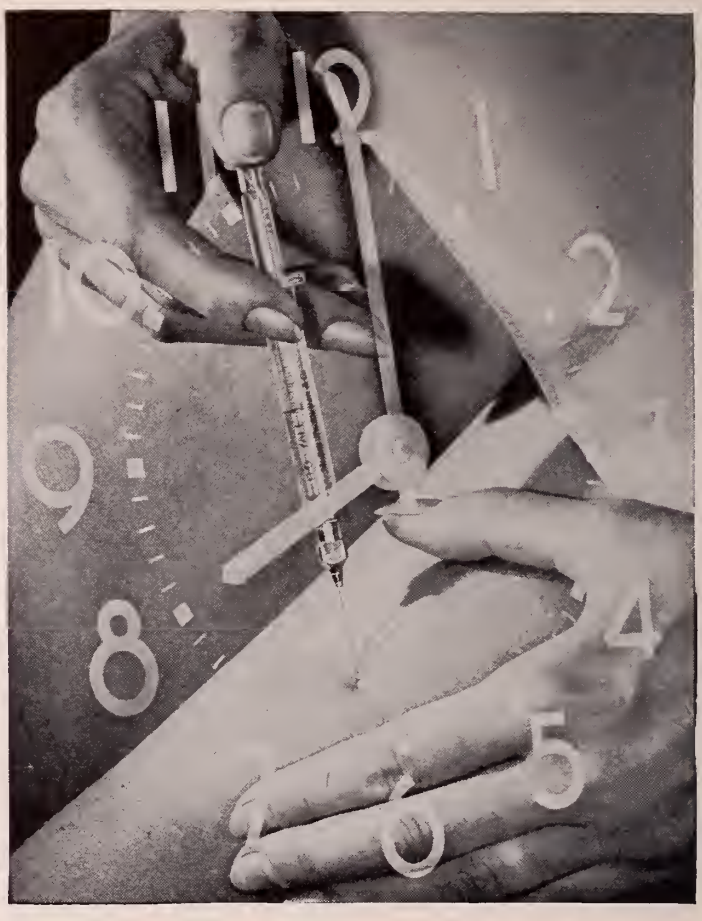
Literature on request

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Peptic Ulcer

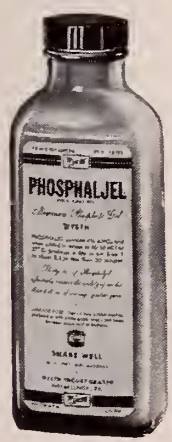
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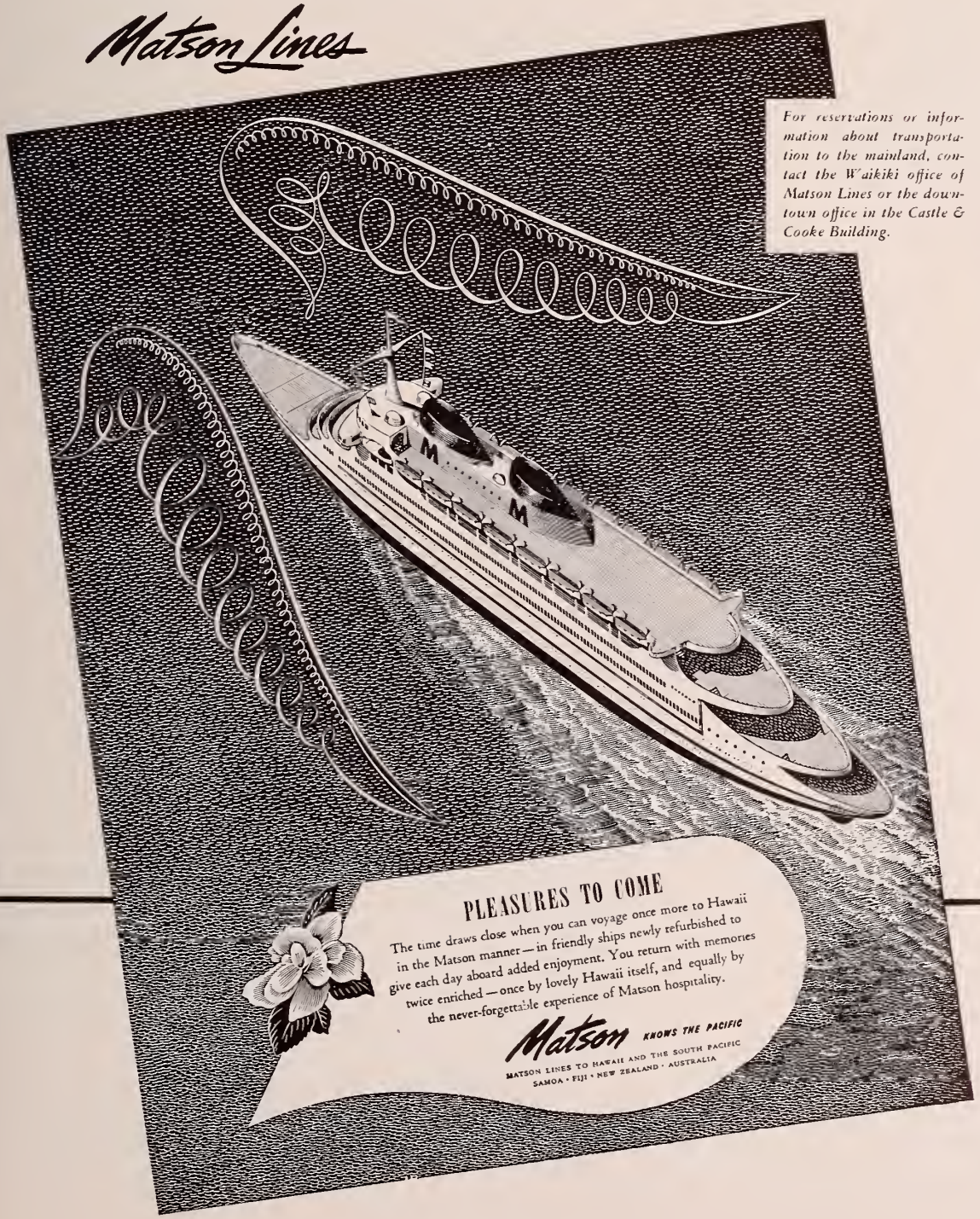
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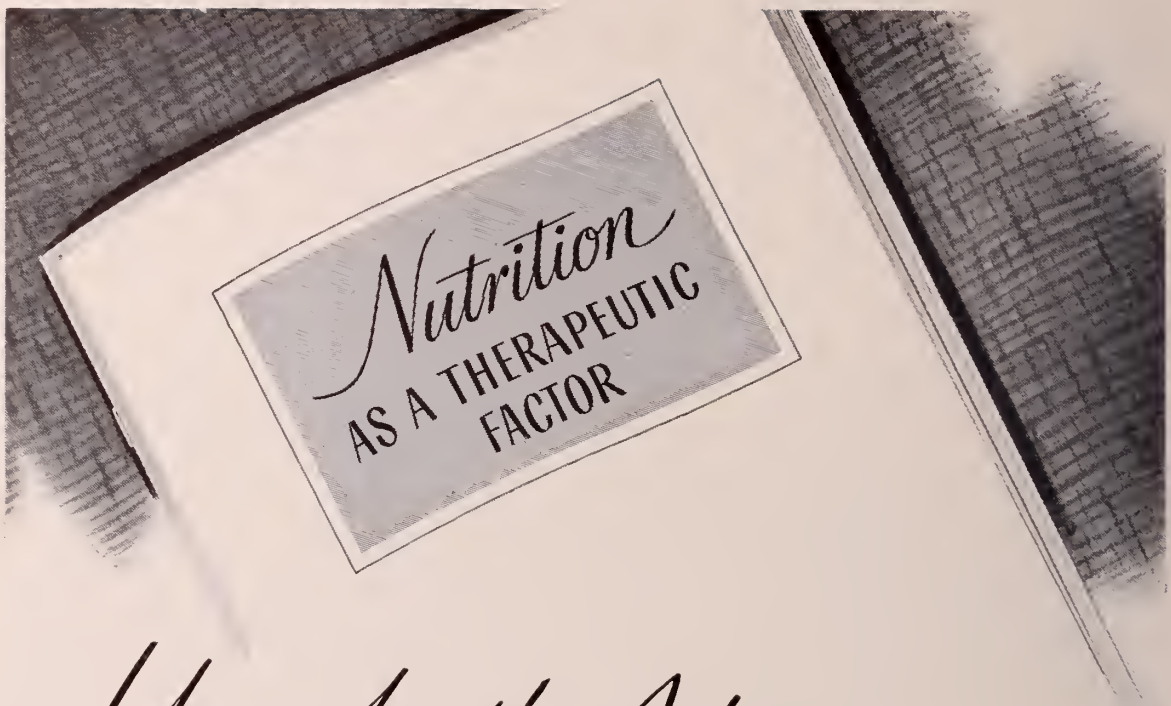
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His first business venture came three years later when he seized an opportunity to buy at auction an entire shipload of highly prized white pine which had just come round the Horn. Selling it to carpenters in the community put him in the lumber business.

WHAT A CHANGE!

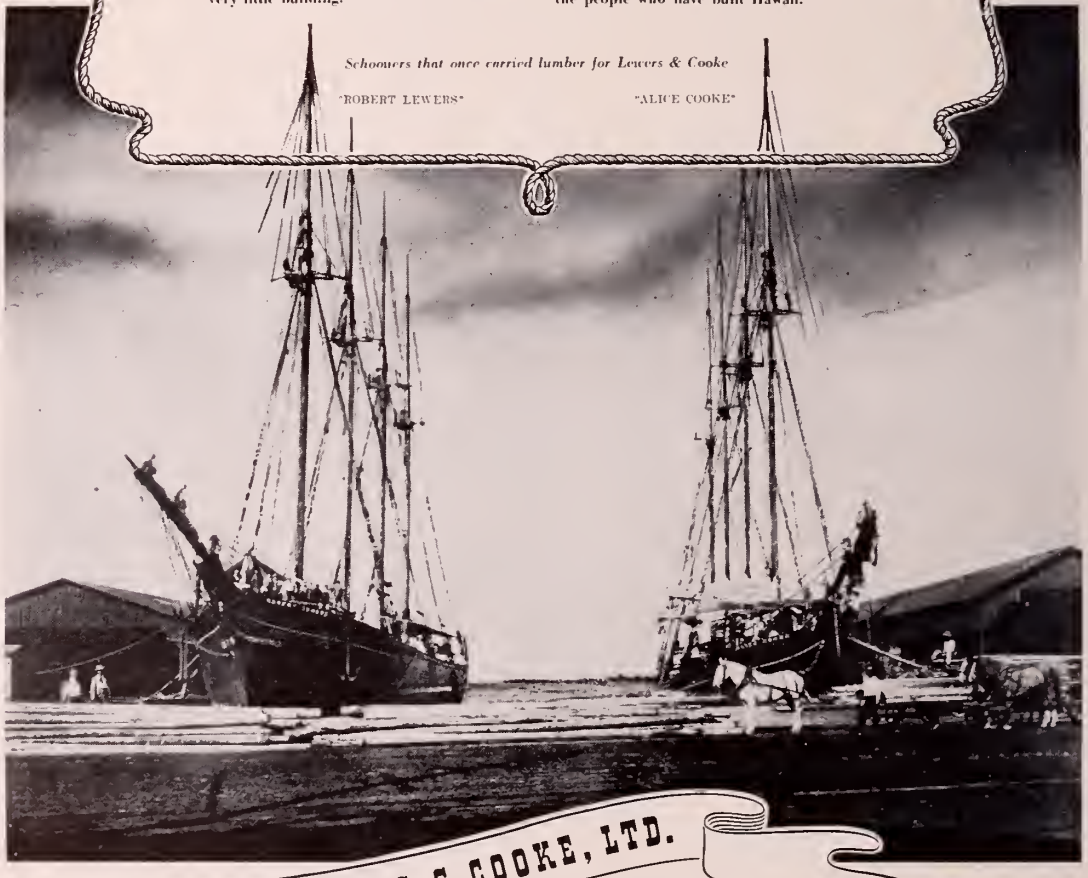
You have to use imagination to realize that the intersection of Fort and Pauahi Streets in the heart of the city's shopping district was once the rambling lumber yard of Chris Lewers. Or that he had to make most of his deliveries in a handcart. For the larger ones he hired a two-wheeled, horse-drawn dray.

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(1) Menefee, E. E., Jr., and Atwell, R. J.: South. M. J. 39:726 (Sept.) 1946.
(2) Woodward, F. D., and Holt, T.: J.A.M.A. 129-589 (Oct. 27) 1945.



PENICILLIN SCHENLEY. Suggested dosage: Intramuscular, 20,000 to 40,000 units every three hours, continued until the patient has been symptom-free for forty-eight to seventy-two hours. Topical, instillation of 3 to 5 cc. of a solution containing 5,000 to 10,000 units per cc., repeated as frequently as indicated in the judgment of the physician.



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*R. H. Follis, D. Jackson, M. M. Eliot, and E. A. Park: Prevalence of rickets in children between two and fourteen years of age, Am. J. Dis. Child. 66:1-11, July 1943.

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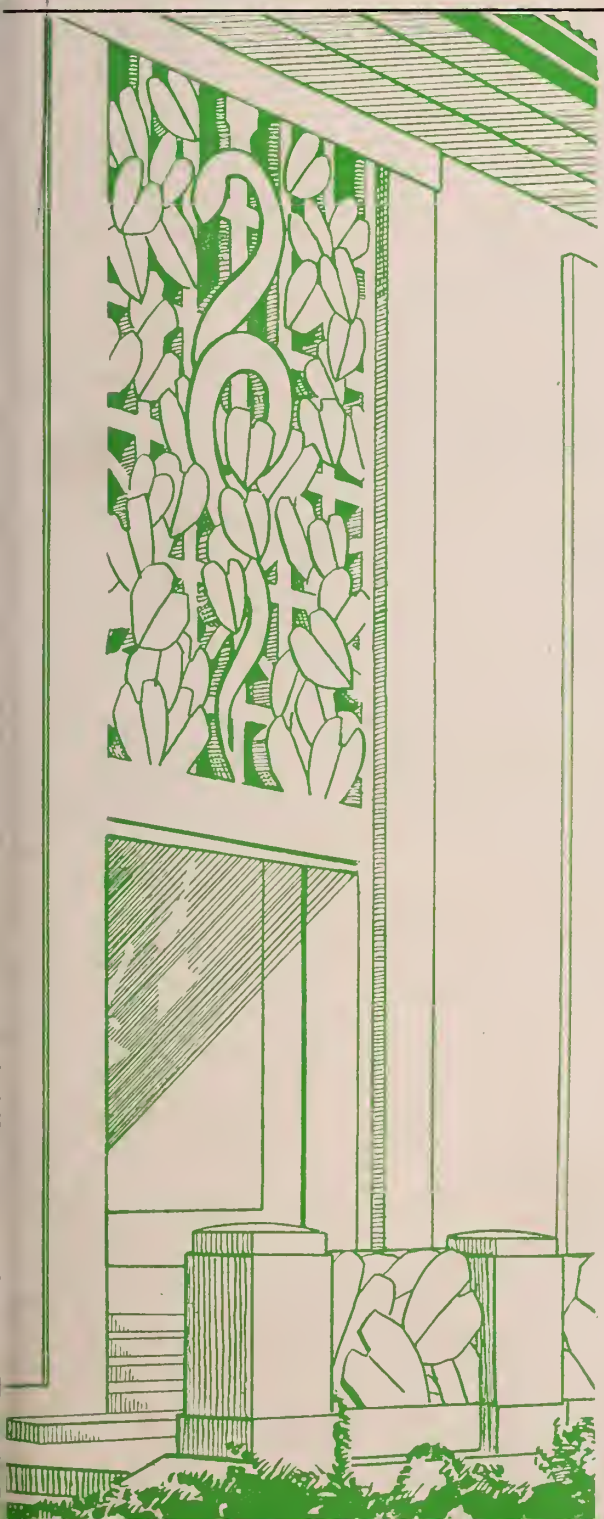
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HISTOPLASMOSIS IN MAN: FIRST CASE IN HAWAII

FRED K. LAM, M.D.
and SUMNER PRICE, M.D.

•

BREAST LESIONS

I. L. TILDEN, M.D.

•

TUMORS OF THE BREAST

J. E. STRODE, M.D.

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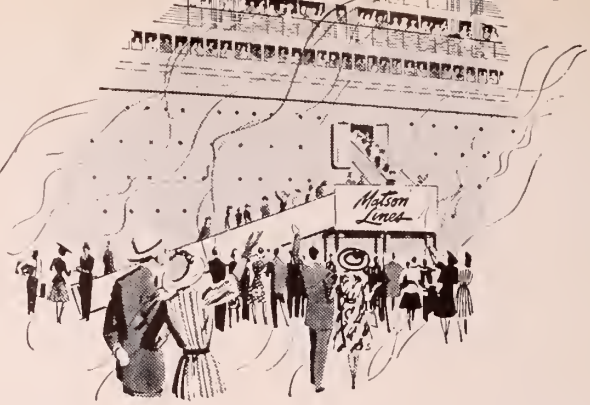
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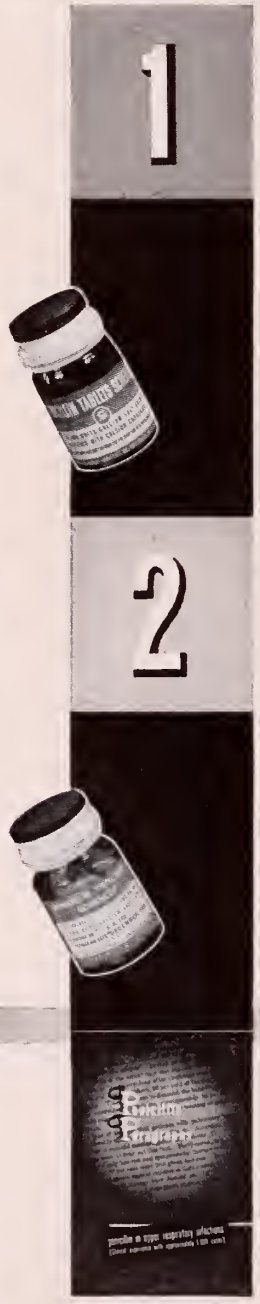
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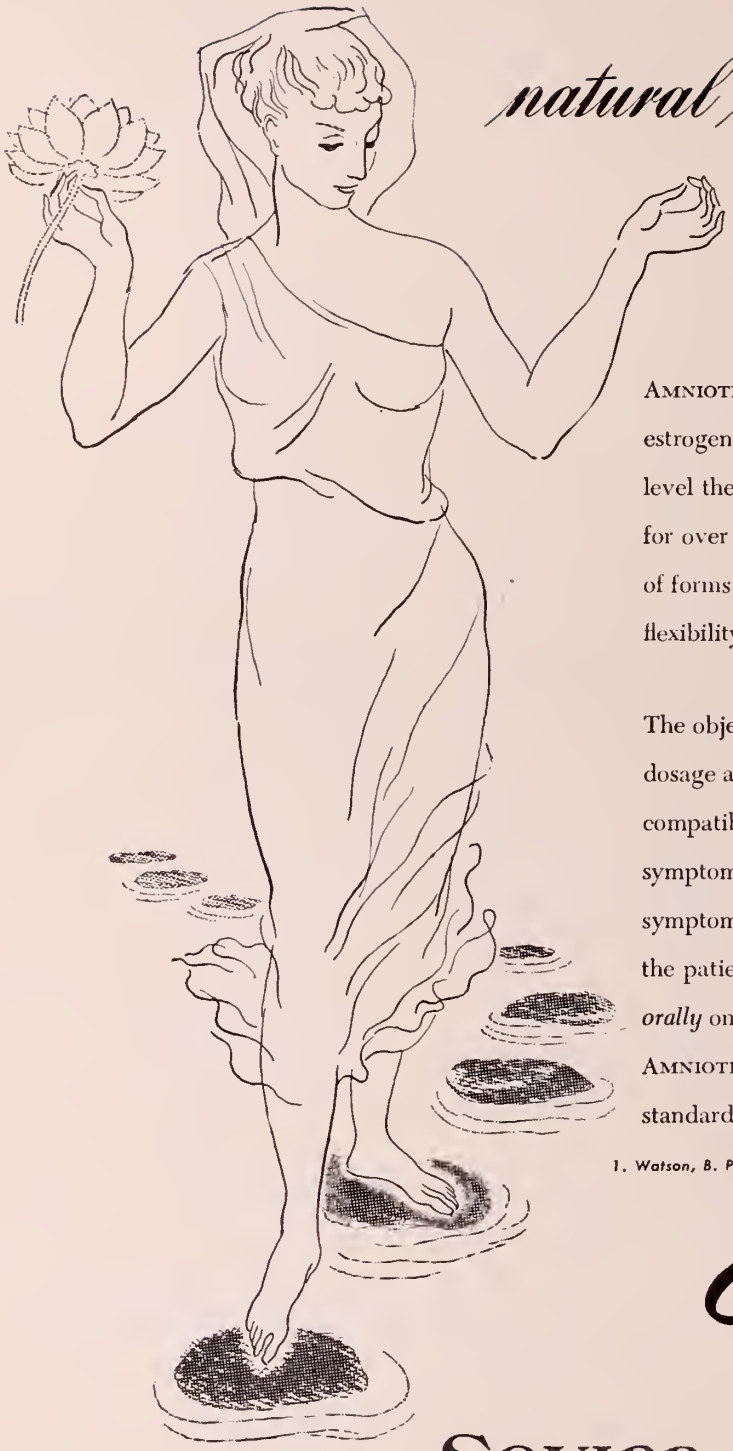
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**Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154*

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1. Watson, B. P.: J. Clin. Endocrinology 4:571 (Dec.) 1944.

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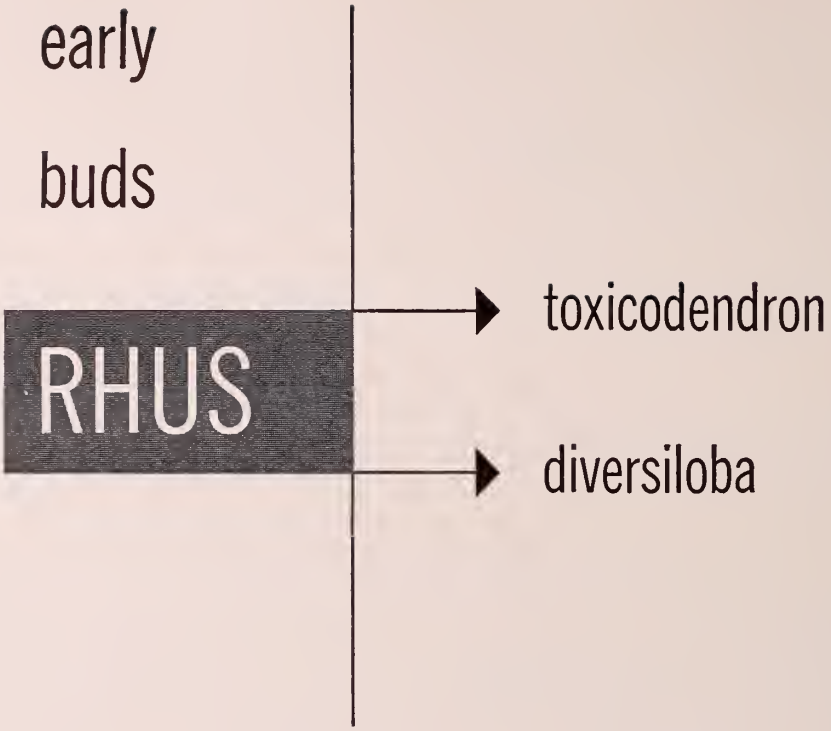
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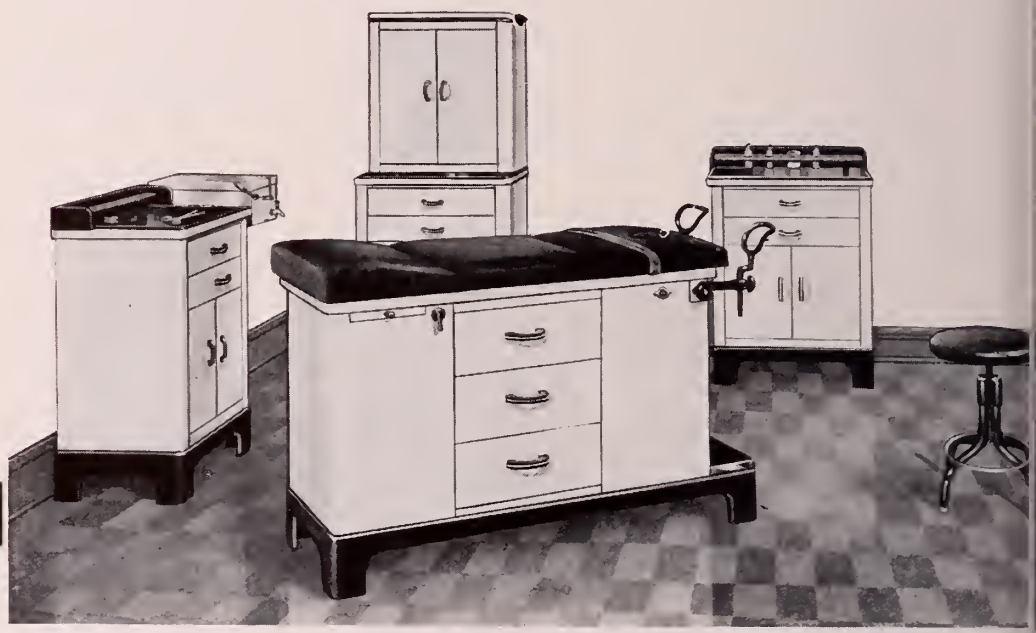
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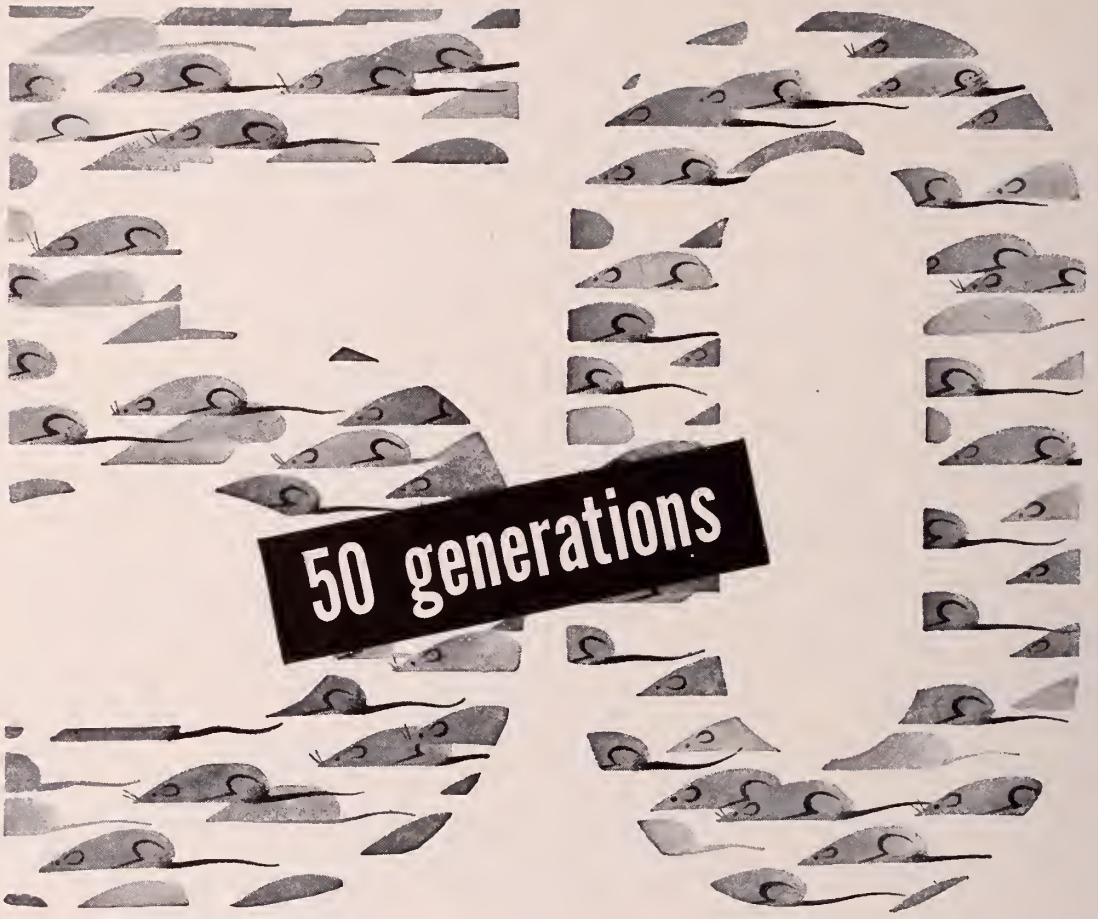
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1 Nationol Reseorch Council Bull. No. 109 (Nov.) 1943, p. 36.
2. Southern M. J. **3**:172 (Feb.) 1946.
3. Statisticol Bull. Metropolitan Life Ins. Co. **27**:6 (Dec.) 1946

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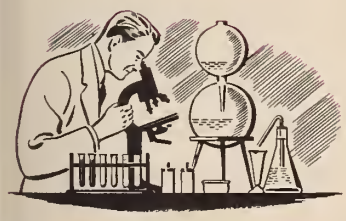


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Illustration by Arthur Sarnoff

"The 500-Mile Grind"

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In most major sports and sporting events medical men make an important contribution. First of all, there must be assurance that every candidate is fit to withstand the physical rigors of the contest. Of equal importance are illnesses and injuries incidental to the sport which must be promptly and skillfully treated. Amateur and professional sports alike would be seriously handicapped were it not for the physician.

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Histoplasmosis in Man

FRED K. LAM, M.D. and SUMNER PRICE, M.D.
HONOLULU

IN 1905 Dr. S. T. Darling, while working in Panama, first described histoplasmosis as a disease. He found three cases at that time and reported them in April, 1906, in the *Journal of the American Medical Association*.[1] These cases were characterized by irregular fever, emaciation, and splenomegaly. Small encapsulated bodies could be found in the tissue, particularly in the cells of the reticulo-endothelial system. He described the organism as a protozoön and named it histoplasma capsulatum.

It was not until 1926, after a lapse of 20 years, that Riley and Watson[2] reported the first case in the United States. Since then, other cases have been found in the United States and other parts of the world.

Meleney,[3] in 1940, analyzed 32 cases, 24 of which occurred in the United States. He pointed out that the microscopic pathology varied with clinical manifestations. In most cases, gray and white nodules or extensive areas of necrosis have been found in one or more organs. In the lungs, abscess cavities or tubercular cavities have been encountered. Caseation of the adrenals has been found. Intestines, spleen and liver have been found to contain nodules. Skin lesions were observed in a few cases.

A complete study and analysis of 71 cases was made in 1945 by Robert J. Parsons and C. J. D. Zarafonetis.[4] They state: "The most common signs and symptoms in the order of their decreasing frequency are fever, hypochromic anemia, hepatomegaly, splenomegaly and lymphadenopathy. Anorexia and loss of weight are common, ulceration of the oral mucosa (particularly the tongue), various types of cutaneous lesions and ulceration of the pharynx and larynx occur frequently. Other manifestations occur occasionally."

The modes of transmission seem to be through dogs, rats, rabbits and guinea pigs, the organism gaining entrance into the body either through the mouth, throat or skin. The latter three have been successfully inoculated.

Symptoms of the disease depend on the organ or organs involved.

1. Pulmonary—cough, complaints of cold or symptoms resembling tuberculosis.
2. Lymph nodes—lymphadenopathy may mimic leukemia, lymphosarcoma.
3. Skin—ulcerative lesions on skin or mucous membrane.
4. Gastro-intestinal—dysphagia occurred in 6 cases studied.
5. Generalized fever, lassitude, hepatomegaly, splenomegaly, leukopenia and anemia.
6. Protean type—arthritis, sore throat, hoarseness, etc.
7. Heart—endocarditis.

DIAGNOSIS

Irregular fever, emaciation, splenomegaly, leukopenia and anemia are suggestive findings. Biopsy and culture are methods of choice. However, material for these is not always accessible. A skin test with histoplasmosis vaccine is the latest development.

PROGNOSIS

Histoplasmosis is nearly always fatal; indeed, the diagnosis is generally made after death. A few skin cases have responded to treatment with salvarsan and bismuth. Antimony (Neostam) has been used with some success.

CASE REPORT

The patient was a 45 year old Portuguese male who entered the hospital on September 1, 1946. He complained of "tightness" in his jaw, first noticed the night before during a baseball game. This condition gradually became worse until he was hospitalized.

Physical examination revealed a well developed and nourished male who was unable to open his jaws. His neck was not stiff and he had no difficulty in bending or laterally rotating his head. He walked into the hospital without assistance. His temperature was 99° F.; blood pressure 150/90. Chest, heart and abdomen were not abnormal.

He gave the impression that he was affected with trismus, which might be due to oral infec-

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1. Darling, S. T.: A Protozoan General Infection Producing Pseudotubercles in the Lungs and Focal Necrosis in the Liver, Spleen and Lymph Nodes, J. A. M. A. 46: 1283 (April 28) 1906.
2. Riley, W. A., and Watson, C. J. Darling's Histoplasmosis in the United States: The Possibility of Further Occurrence of Cases, Minnesota Med. 9: 97 (Feb.) 1926.
3. Meleney, H. E.: Histoplasmosis (Reticulo-Endothelial Cytomycosis): A Review with Mention of Thirteen Unpublished Cases, Am. J. Trop. Med. 20: 603 (July) 1940.
4. Parsons, R. J. and Zarafonetis, C. J. D.: Histoplasmosis in Man, Archives of Int. Med. 75: 1 (Jan.) 1945.

tion, cerebellar tumor or tetanus. Spinal puncture was done on the day of admission; the spinal fluid pressure was 330 mm. of water, mastic was 00000 and total protein was 41 mgm. per hundred cc. Roentgenograms of the jaws showed no fracture, abscess or unusual condition. Tetanus was felt by both the attending physician and a consultant to be an extremely unlikely diagnosis on clinical grounds.

The initial blood count done on admission was 9700 leucocytes per cubic mm., with 68% polymorphonuclears. The urine was normal. STS (Laughlen) was negative.

The patient was given penicillin during hospitalization together with sedation and intravenous fluids. An attempt to insert a Levine tube for feeding purposes was given up since it caused too much irritation and struggling on the part of the patient.

On the third hospital day, a consultation was held at which it was decided, in view of negative physical findings and a definite psychoneurotic history, that he might be suffering with acute psychoneurosis. The resident in psychiatry saw the patient and elicited more information from the wife of the patient. She said that the man had been under a very great strain at work for over a year. He had been doing the work of two or three men, was very conscientious, and each month he had to meet very difficult deadlines. He had been looking forward to having his son come into the auditing business with him. He complained many times during the year that he would "blow" his "top" if he didn't "get out of this business." The precipitating event, the psychiatrist felt, was the fact that the man went to see his son play baseball on the day prior to his admission. The boy was a very good baseball player and did very well that day. The father was proud of his son at that time, but at the same time he could see that his son was not going to be in the auditing business and would probably end up as a professional ball player. Apparently, quite a bit depended on this game because there were scouts present.

The patient was followed each day under the impression that he was an acute psychoneurotic. He would be all right, lying in bed with his mouth open, when looked at from behind a screen; but if anyone entered the room, he would immediately clamp his jaws together. His condition gradually became worse and on the fifth hospital day, the temperature began to rise slowly until the seventh day, when it was 105° F., and when he died suddenly with pulmonary edema.

AUTOPSY FINDINGS

The body was that of a Portuguese male, 45 years of age. On the right ankle was found a small area of hypertrophy which was somewhat abraded. This was the only injury to the skin found anywhere. The pleura on the left showed generalized fine adhesions. The right pleura was clear. The right lung weighed 830 gm., the left 780. The lungs showed about three plus edema throughout. There was no evidence of consolidation. Peribronchial nodes were slightly enlarged and were somewhat anthracotic. The bronchi were filled with brownish froth with traces of mucus, which was not sufficient to plug them. The heart weighed 250 gm. There was a small friable clot in the right pulmonary artery, but this was thought to be post-mortem in type. The kidneys were somewhat scarred, granular on the surface, weighed 140 and 160 gms., and were thought to be nephrosclerotic. The brain was sectioned and showed no gross abnormality. In other words, nothing spectacular was found, except in the liver, where there were discrete yellowish foci, from 0.5 to 2 cm. in diameter, which were not sharply circumscribed. It was thought at the time these might possibly be poorly defined small hepatomas. The liver weighed 1860 gm.—a little large, probably due to congestion.

MICROSCOPIC DESCRIPTION

Adrenals: Showed postmortem degenerative changes, but otherwise were normal.

Prostate: Showed a benign adenomatous hypertrophy of a moderate degree.

Liver: Showed several small foci indistinguishable from the normal liver tissue, except that they contained a slightly larger amount of fat and tended to be circumscribed.

Another section of liver showed acute passive congestion, and a small focus which contained an unusual amount of lipoid or fatty deposit. In addition, there were several scattered granulomatous areas containing epithelioid cells and giant cells, located chiefly in the periportal regions, adjacent to, and sometimes incorporating, a small bile duct (interlobular).

Another section of liver showed a small miliary cavernous hemangioma which was of no particular consequence.

Heart Muscle: No marked variation from normal.

Pancreas: Normal.

Lungs: Acute pulmonary edema. In another section, there were multiple foci of scattered giant cell formation with old areas of fibrosis in the pleura. Immediately beneath, there were other

areas of granulomatous character showing multinucleated giant cells and a few small nests of epithelioid cells. In some instances, the giant cells appeared to be of foreign body type.

Spleen: Also showed areas of pseudo-tubercle formation with multinucleated giant cells, which for the most part seemed of foreign body type. A feeble epithelioid cell reaction, a small amount of granulation tissue, and early fibrosis were present. Some of the areas showed early hyalinization. The intervening splenic pulp was relatively normal except for congestion.

Peribronchial Lymph Nodes: Showed moderate congestion and a diffuse infiltration with multinucleated giant cells sometimes appearing independently and sometimes in association with fibrosis and epithelioid cell reaction. The lesion was by no means typical of tuberculosis.

Kidneys: Showed much less evidence of advanced nephrosclerosis than would have been anticipated from the gross picture. There was evidence of slight lobulation of some of the glomeruli, but much less scarring than seemed evident in the gross specimen. The medullary portions showed evidence of interstitial fibrosis.

GENERAL INTERPRETATION OF MICROSCOPIC FINDINGS

This patient undoubtedly had some generalized systemic infection, producing pseudotubercles in the liver, peribronchial lymph nodes, lungs and spleen, with epithelioid cell formation, fibrosis, granulation tissue, and giant cell formation. In spite of these findings, however, these were not typical of tuberculosis.

DIAGNOSIS

Examination of the recut specimens showed spherules in the giant cells, containing a small central dot. These averaged about 2 to 3 micra in diameter, and corresponded to the organisms found in histoplasmosis. Re-examination of all slides showed these minute bodies in the giant cells of the lung, and particularly the peribronchial lymph nodes, as well as independent of giant cells in the liver, adrenal, and in the blood clot from the heart. It seems the diagnosis of histoplasmosis is histologically justified on the above findings.

COMMENTS

This case was presented at the Thursday morning clinic at The Queen's Hospital and was attended by at least fifty physicians and surgeons of the staff.

Dr. Judd: Did he have any fever when he was admitted? Answer: No. Patient showed no rise in temperature for three days. Why was penicillin given? Answer: On the possibility that there was an abscess present.

Dr. Arnold: Dr. Hartwell examined that patient and was confident it was not a case of tetanus.

Dr. Wedge: The findings were typical of a psychoneurotic patient. I did not think it was tetanus, because when I talked to him in a low voice, he could open his jaw a little and talk to me. I would not say that this patient died of psychoneurosis, but I do say that he was also psychoneurotic.

Dr. Johnston: How about evidence of wound or scar? Answer: There was an old indurated scar on the left leg anteriorly, which was there for over 15 years.

Dr. Hoffman: The trismus was intermittent.

Dr. Izumi: How about studies of the spinal fluid, sputum, or the lesion on his leg?

Dr. Price: These are not usually important in this type of case.

Dr. Lam: Although histoplasmosis is a fatal disease, it generally runs a chronic course. This case was certainly acute. When first seen he was only complaining of difficulty in opening his mouth. This condition rapidly got worse and before death, there was also quite of bit of spasm in his neck and lumbar muscles.

SUMMARY

A human case of histoplasmosis, diagnosed at autopsy by the discovery of the causative organism in the tissues, is reported.

So far as is known, this case was acquired in the Territory of Hawaii.

This is believed to be the first case of histoplasmosis diagnosed in Hawaii.

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Breast Lesions, with Particular Reference to Cystic Disease, Fibroadenoma, Papilloma and Carcinoma

I. L. TILDEN, M.D.
HONOLULU

It is impossible to understand the various pathologic states of the breast unless one has some knowledge of breast anatomy and physiology. It is of fundamental importance at the outset to grasp the fact that the breast is an endocrine organ in the sense that its epithelium, like the epithelium lining the uterus, is remarkably labile in its responsiveness to certain hormones. Time does not permit an adequate discussion of either the anatomy or physiology of the breast. Suffice it to say that the breast epithelium is acted upon by special stimuli at five different stages in the life of the individual: birth, puberty, menstruation, pregnancy, and lactation. The stimulus in each case leads to pronounced hyperplasia of the breast epithelium with the formation of countless new acini, and their subsequent involution when the stimulus is removed. It is thus obvious that, during the reproductive life of the woman, the breast is constantly being played upon by various hormones, and is constantly passing through a monthly hyperplasia-involution cycle. It is thus not surprising that a variety of anatomic states can be recognized in the breast which are purely physiologic in their mode of origin.

Table 1. *Classification of Breast Lesions*

I. Congenital and Acquired Anomalies.
II. Inflammation.
 A. True Infectious Mastitis.
 B. Chronic Specific Granulomas.
 1. Tuberculosis.
 2. Fungus Infections.
 C. Plasma Cell Mastitis.
 D. Fat Necrosis.
III. Hyperplasias.
 A. Chronic Cystic Mastitis.
IV. Neoplasms.
 A. Fibroadenoma.
 B. Papilloma.
 C. Carcinoma.
 D. Rare Tumors.

CLASSIFICATION OF BREAST LESIONS

A simple scheme of classification of various breast lesions is shown in Table 1. This lists congenital and acquired anomalies, inflammation (which includes true infectious mastitis), the chronic specific granulomas, plasma cell mastitis, and fat necrosis; hyperplasias, which include as the most important condition so-called chronic cystic mastitis; and neoplasms. The discussion to follow will be entirely concerned with the four most common and important conditions: fibroadenoma, papilloma, carcinoma and chronic cystic mastitis.

FIBROADENOMA

There is little controversy in regard to the nature, biologic history, or therapy of fibroadenoma. The term itself, however, is a misnomer, because the tumor is essentially and primarily a fibroma, there being comparatively little epithelial proliferation in most of them. It may arise either from the subepithelial connective tissue, or from the periductal or periacinar connective tissue, the distinction being made by the use of elastic tissue stains to demonstrate the elastic membrane of the ducts. If the bulk of the neoplastic growth is internal to the elastic membrane, a subepithelial rather than a periductal connective tissue origin is assumed. There is little practical value in attempting to make this distinction, or even the distinction between peri- and intracanalicular types, since the clinical appearance and biologic history, so far as malignancy is concerned, are identical. Intracanalicular simply means that the bulk of the connective tissue growth has taken place into the lumen of the ducts, while in the pericanalicular type the majority of the growth has been outward.

Fibroadenomas vary in size from tiny microscopic nodules up to large tumors which may equal the breast itself in volume, but in this enlightened age they are usually seen when they are quite small —1 to 3 cm. in diameter. They constitute sharply circumscribed, freely movable nodules, and grossly exhibit a white, moist, often bulging, sometimes mucoid-appearing cut surface. They may be single or multiple, and sometimes a single nodule is found to consist of several separate lobules of neoplastic tissue.

Microscopically the most striking finding is marked proliferation of loose, somewhat edematous, often mucoid-appearing connective tissue which may surround the ducts and acini or appear in the form of intraductal masses (Fig. 1).

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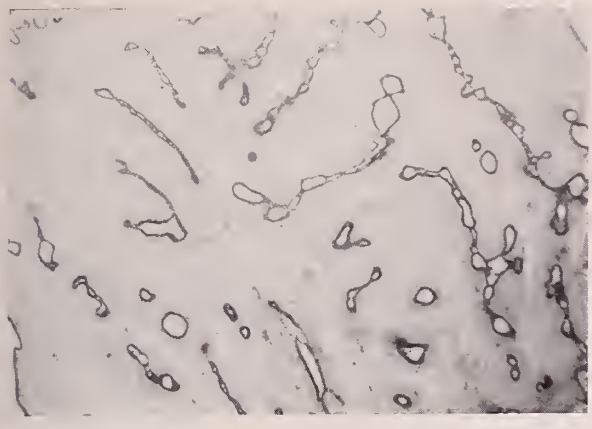


FIG. 1. Fibroadenoma. Observe the connective tissue proliferation which is impinging upon small ducts and acini and compressing them. Hematoxylin and eosin, X 80.

The diagnosis is usually made with ease, but this is not always so. Occasionally the connective tissue constituting these tumors is mature and acellular in type, imparting to them a hardness which may mimic carcinoma, particularly if the process tends to be diffuse rather than focal. The term sclerosing fibroadenomatosis has been applied to this sort of a diffuse process, and it may offer great difficulty in diagnosis so far as carcinoma is concerned.

The important thing to keep in mind, once the diagnosis has been made, is that *fibroadenomas have no relationship whatever to carcinoma,* the malignant counterpart of this neoplasm being a sarcoma, which is so rare that it can be ignored for all practical purposes.

CYSTIC DISEASE OF THE BREAST

The various cystic states of the breast often referred to by the term "chronic cystic mastitis" constitute by far the most confusing and controversial group of breast lesions, but I will attempt to show that the confusion is largely in terminology, and that most authors writing on the subject are describing the same state under different names. Table 2 shows the three conditions which have been described as comprising so-called chronic cystic mastitis, and the names which have been used by different men for these conditions. It is not really so complicated as it looks, as I shall try to show.

MAZOPLASIA (ADENOFIBROSIS)

Group I, called mazoplasia by Cheatle and Cutler,[1] and regarded by them as a form of desquamative epithelial hyperplasia, is termed adenofibrosis by Taylor,[2] Cole and Rossiter,[3] and others, and chronic mastitis by Warren[4] and others. Clinically it is characterized by pain, which is often most severe just before the onset of menstruation. If the subcutaneous fat is small in amount, a diffuse fine nodularity can be distinguished by palpation, and the breasts feel harder than normal. The condition may involve one or both breasts, or only a part of one breast. The age incidence is between 30 and 40, and multiparous women are more often affected than women who have never borne children.

Histologically the process involves small ducts and acini which show some evidence of desquamative epithelial hyperplasia, but the most striking change is in the periacinous and periductal connective tissue, which shows pronounced hyperplasia. Lymphocytic infiltration is often present; this, together with the connective tissue proliferation, originally prompted the terms of "chronic mastitis" and "chronic interstitial mastitis," although it is now recognized that the condition is not truly inflammatory. The end result in long standing cases is widespread and extensive fibrosis, with small isolated acini separated by broad sheets of fibrous tissue (Fig. 2).



FIG. 2. Mazoplasia. The breast fat is being replaced by a mature type of connective tissue and ducts and acini are relatively few in number. Hematoxylin and eosin, X 40.

It is the opinion of Cheatle and others that the condition verges on the physiological since the breast at puberty and after pregnancy normally may show similar changes. It is only when the changes are pronounced, that the symptom of pain is produced.

1. Cheatle, Sir G. L., and Cutler, M.: Tumors of the Breast: Their Pathology, Symptoms, Diagnosis and Treatment, J. B. Lippincott Co., Philadelphia, 1936.
2. Taylor, H. C.: The Endocrine Aspects of Chronic Mastitis: Further Report on Rates of Estrogen Excretion and Results of Hormone Therapy, Surg., Gynec. & Obst. 74:326 (Feb. 15) 1942.
3. Cole, W. H., and Rossiter, L. J.: Chronic Cystic Mastitis: With Particular Reference to Classification, Ann. Surg. 119:573 (April) 1944.
4. Warren, S.: The Relation of "Chronic Mastitis" to Carcinoma of the Breast, Surg., Gynec. & Obst. 71:257 (Sept.) 1940.

Gross examination shows single or more often multiple cysts, which vary from microscopic size up to several centimeters in diameter. They are filled with clear fluid, and exhibit a smooth internal lining. Histologically there is usually epithelial hyperplasia which again is desquamative in type, the shed epithelial cells often appearing within the lumen of the cysts, dilated ducts and acini (Fig. 3).

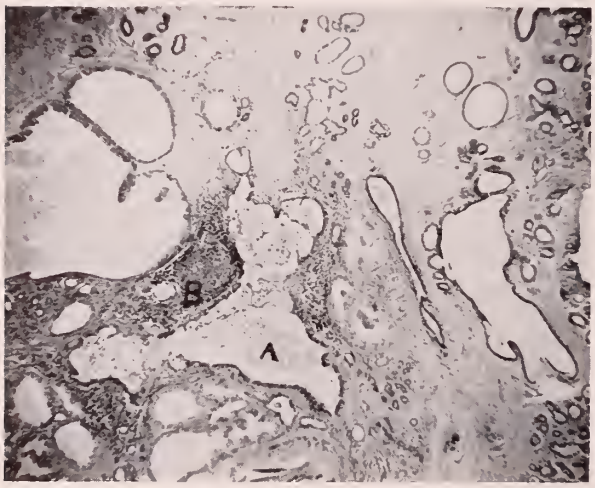


FIG. 3. Benign cystic disease of the breast. Note the irregular cystic dilatation of the ducts, the desquamated epithelial cells at A, and the lymphocytic infiltration at B. Hematoxylin and eosin, X 40.

HYPERPLASIA WITH PAPILLOMA

If true epithelial hyperplasia or benign neoplasia (papilloma formation) should supervene, as they frequently do, the condition passes into Group III, called cystipherous desquamative epithelial hyperplasia with papilloma formation by Cheatle and Cutler, and precancerous hyperplasia by Cole and Rossiter.

The clinical features are exactly the same as in the preceding group except that the superimposed factors of true hyperplasia and neoplasia become engrafted onto the cystic state at a somewhat later age period, the late thirties and early forties.

Gross examination of such a breast may show small localized granular areas on the lining of the larger ducts and cysts, or even small solid nodules of papilloma formation. Under the microscope, the epithelial cells, instead of desquamating into the lumen, pile up into masses forming single or multiple solid papillomas, or elongated hyperplastic masses composed of many layers of cells. A new vitality has been imparted to the cells, and the condition has passed from one of hyperplasia into one of neoplasia.

By referring again to Table 2 it will be seen that most of the names used in the literature include both the cystic state *without* true hyperplasia, and the cystic state *with* true epithelial hyperplasia —and neoplasia. This list, which is not a complete one by any means, includes chronic cystic mastitis, fibroadenomatosis cystica (Semb), Schimmelbusch's disease, mastopathia cystica, Reclus's disease, benign cystic disease, cystic glandular hyperplasia, bluedome cyst, and benign non-uniform hypertrophy. These names are used in many different ways but in general are broad in their application, and make no pretense at distinguishing between cystic disease without hyperplasia, and cystic disease with hyperplasia. The term "Schimmelbusch's disease," however, is most often employed to designate the latter condition, and the term "bluedome cyst" implies relatively few large cysts without epithelial hyperplasia or neoplasia.

Because the cystic state *without* hyperplasia commonly passes by insensible gradations into the cystic state *with* hyperplasia or neoplasia, and because the latter state has a definite relationship to carcinoma, it seems to me that it is important to make the distinction between the two. The only practical way of doing this is by careful gross and microscopic study of the excised breast tissue.

The statement that cystic disease of the breast must be regarded as a precancerous lesion can be made, I think, with some assurance. In Cheatle's large series of breast carcinomas, 20 per cent showed evidence of a pre-existing cystic state. The paper by Shields Warren is perhaps the best on the subject. He studied the cancer attack rate in a group of 1,206 women in Massachussets who had had previously benign lesions of the breast removed, and compared it with the attack rate in the female population at large. In the age group of 30 to 49 of women with proven cystic disease of the breast, the cancer attack rate was 11.7 times the rate in the same age group for the female population of Massachussets; in the group over 50, 2.5 times as great; and in the entire group, 4.5 times as great. In a similar but smaller study made by Clagett and his co-workers at the Mayo Clinic,[1] practically identical results were obtained. Thus it would appear that the dictum held so tenaciously by Bloodgood for so many years, that cystic disease of the breast has no relationship to carcinoma, is no longer tenable.

PAPILLOMA

Mention has just been made of papillomas in connection with the cystic state, and the statement made that papilloma formation—benign neoplasia —commonly becomes engrafted on the cystic state.

1. Clagett, O. T.: Plimpton, N. C., and Root, G. T.: Lesions of the Breast, Surg. 15:413 (March) 1944.

It is also possible for papillomas to form in a breast which is not the seat of cystic disease. In either case the tumor, or tumors, may at times become large enough to attract clinical attention. Under these circumstances the lesion is commonly referred to as "duct papilloma," although the term "papilloma" is adequate since all of them arise from the epithelium of one or more ducts. The larger papillomas are often situated in the nipple or close to it, arising from the epithelium of one of the larger ducts. They may be single or multiple; confined to one duct system or present in several; unilateral or bilateral; and produce, as their most constant clinical symptom, serous or hemorrhagic discharge from the nipple.

Pathologically they differ fundamentally from fibroadenomas by virtue of the fact that they arise primarily by a process of epithelial rather than connective tissue hyperplasia. Grossly they appear in the form of nodules of varying size, and are much more friable in consistency than fibroadenomas. Histologically, striking epithelial proliferation is observed, with the formation of papilliferous, often secondarily adenomatous masses within the lumen of a duct or ducts (Fig. 4). Sometimes

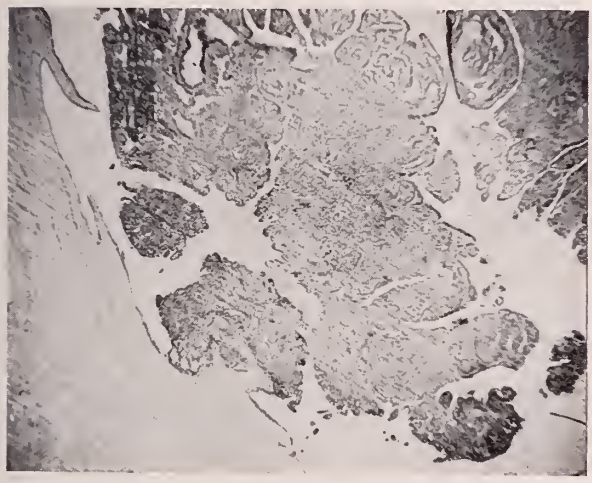


FIG. 4. Papilloma formation. There is a solid mass of epithelial cells arising from the lining of duct, and filling its lumen. Hematoxylin and eosin, X 40.

malignant appearing areas may be present but with the cells still confined within the limits of the duct system, and such cases offer great difficulty in histologic diagnosis. If the duct has been broken through, with infiltration of the surrounding connective tissue, there is of course no difficulty in diagnosing malignancy.

Biologically, papillomas are by far the most dangerous of all benign breast lesions from the standpoint of the development of carcinoma.

CARCINOMA

Carcinoma is the ultimate catastrophe. I can see no particular advantage in employing purely descriptive morphologic terms such as medullary, scirrhous, encephaloid, simplex, etc., because it has been demonstrated time and time again that the same carcinoma may exhibit all of these morphologic appearances in different parts of the primary lesion and in secondary deposits.

There may be some justification for attempting to grade the neoplasm as to degree of anaplasia, but this is difficult, and is not nearly so valuable as surgeons have been led to believe. It is relatively easy to recognize the highly undifferentiated Grade IV type, composed of diffusely growing cells uniform in size and shape, but it is not so easy to distinguish between degrees of malignancy in the large middle group (Grades II and III) which constitutes the majority of breast carcinomas. Even granting that this can be done with reasonable accuracy, it would nevertheless seem to be of little practical therapeutic or prognostic value, as witness Broder's original classification in which carcinomas of Grades II and III accounted for 85 per cent of all breast carcinomas, and were thus similar in their prognostic implications.

The type of carcinoma in relatively young women which has been referred to as "acute inflammatory carcinoma" because of its rapid growth and associated signs of inflammation is almost invariably extremely anaplastic in type, falling into Grade IV, while the rare gelatinous carcinoma which produces large amounts of mucus is usually very well differentiated, and falls into Grade I. The prognosis in the anaplastic type is uniformly bad, no matter how it is treated, while the gelatinous type grows slowly, metastasizes late, and offers a good prognosis. The great majority of breast carcinomas fall into the middle group (Grades II and III), where there are no clinical or even pathologic characteristics which are of material aid in either treatment or prognosis, except, of course, the presence or absence of axillary metastases.

FROZEN SECTIONS

Rapid frozen sections have a definite place in the management of breast lesions, but are not nearly so valuable as many surgeons believe. If there is a definite nodule to freeze, well and good; but *if the breast is the seat of a diffuse process* such as mazoplasia, or cystic disease with or without hyperplasia, *quick frozen sections are worthless.*

In such cases the surgeon must wait for fixation, careful gross examination, and microscopic study of numerous blocks of tissue selected at leisure.

The chief value of an immediate frozen section is in confirming a clinical or gross diagnosis of carcinoma. A carcinoma is sometimes detected when it is represented by a small nodule—as small as 1 cm. in diameter—and the diagnosis of such a lesion can be made as readily by immediate frozen sections, as by any other means. It is my personal belief that a frozen section diagnosis of carcinoma should be obtained in every case, no matter how clinically typical it may appear to be. Besides sclerosing fibroadenomatosis, already alluded to, such rare conditions as fat necrosis and plasma cell mastitis may simulate carcinoma very closely indeed, and radical mastectomies are still being done for these conditions in the mistaken belief that they are malignant.

In conclusion I would like to emphasize (1) that cystic disease of the breast, often referred to by the term "chronic cystic mastitis" as well as by many other names, does have a definite relationship to carcinoma, particularly if areas of true epithelial hyperplasia —or benign neoplasia— are discovered upon pathological examination; (2) that papillomas, which are true epithelial neoplasms, are even more dangerous in this respect, and (3) that fibroadenomas are essentially fibromas and thus have no relationship whatever to carcinoma.

Biologically mazoplasia—or adenofibrosis—has no relationship to any neoplasm except fibroadenoma, such tumors frequently developing in mazoplastic breasts as a result of local areas of connective tissue proliferation. The epithelial changes in adenofibrosis are minor and desquamative in type, which simply means that the cells lining the ducts and acini are sooner or later shed into the lumen, and do not pile up into masses. Cyst formation is absent.

TABLE 2.

Cystic Disease of the Breast (Chronic Cystic Mastitis)

I.	ADENOFIBROSIS. (*Mazoplasia:* Cheatle and Cutler) (*Chronic mastitis:* Warren)	
II.	CYSTIC DISEASE WITHOUT NEOPLASIA (*Benign Parenchymatous Hyperplasia:* Cole and Rossiter) (*Cystipherous Desquamative Epithelial Hyperplasia:* Cheatle and Cutler)	*Bluedome cyst* (Bloodgood) *Benign non-uniform Hypertrophy* (Price) *Chronic cystic mastitis* *Fibro-adenomatosis cystica* (Semb)
III.	CYSTIC DISEASE WITH NEOPLASIA (*Precancerous Hyperplasia:* Cole and Rossiter) (*Cystipherous Desquamative Epithelial Hyperplasia with Benign Neoplasia:* Cheatle and Cutler)	*Mastopathia cystica* (Aschoff) *Maladie kystique* (Reclus) *Reclus' disease* *Cystic glandular hyperplasia* (Boyd) *Schimmelbusch's disease*
IV.	CARCINOMA	

HYPERPLASIA WITHOUT PAPILLOMA

Group II, termed cystipherous desquamative epithelial hyperplasia by Cheatle and Cutler, and benign parenchymatous hyperplasia by Cole and Rossiter, has a wide variety of synonyms, as can be seen by again referring to Table 2. Clinically the patient presents herself with a single large cyst, the bluedome cyst of Bloodgood; with multiple cysts; or, most frequently of all, with a localized nodularity. Pain is usually absent. The condition occurs most often in the decade of the late twenty and early thirty years of life.

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Tumors of the Breast

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THE ONLY POINT that I wish to emphasize regarding breast tumors is: When a woman presents herself with a lump in her breast the only sound advice to give her is to have the tumor out without delay and examined adequately. There are mighty few exceptions to this statement. It has taken the medical profession a long time to learn that this is the only sane approach to this problem, and there are still too many doctors among us who advise such patients to first wait and watch developments. What they are watching for I have never been able to determine, unless it is for the beginning signs of inoperability. I have never regretted advising immediate operation, but I have on several occasions deeply regretted a policy of watchful waiting.

The public has been so well informed through educational programs by way of the press, the radio and various publicity campaigns that few women are not aware of the potential possibilities when they discover a lump in their breast. Fortunately these organs occupy a position that permits comparatively early detection of the presence of a tumor.

Now that we are being consulted as never before by women who have or think they have trouble with their breasts it is up to us to be prepared to give such patients the soundest advice that is available to us at the moment.

It is now the exception rather than the rule to see patients with a breast lesion the nature of which can be determined clinically. The classical picture of a stony hard mass, adherent to surrounding structures, with dimpling of the skin and retraction of the nipple, needs no highly trained pathologist to determine its nature, and unfortunately it leaves little doubt as to the ultimate outcome to the individual.

CHRONIC CYSTIC MASTITIS

As Dr. Tilden has pointed out, there is really only one condition that gives both clinician and pathologist alike concern in knowing how to proceed, and that is chronic cystic mastitis. It is the most common lesion that we are called upon to treat. It is the most difficult lesion both clinically and microscopically to differentiate from malignancy; its nomenclature so far as I am concerned is lost in a sea of uncertainty; its exact relationship to cancer of the breast has not been clearly established. The disease is frequently bilateral and the only way of being sure of eradicating it completely is by bilateral mastectomy.

In 1929 Bloodgood[1] challenged the then prevailing opinion that chronic cystic mastitis was a precursor of cancer. He reported 500 cases of cystic disease, followed in some instances for as long as 29 years, in only 5 of which cancer developed, an incidence even less than occurs in the absence of cystic disease.

In 1934 Campbell[2] summarized the literature and submitted a series of 290 cases. From these investigations he concluded that cystic disease did not predispose to malignancy.

Lewis and Geschickter[3] in 1938 reported 515 cases of cystic disease, one-half of which were followed for 5 years. From this study it was their conclusion that cystic disease did not predispose to cancer.

Vanden Berg[4] has recently reported 57 simple cysts of the breast, followed in some instances for as long as 14 years (an average of 7½) without finding any relationship to malignancy. He advocates simple aspiration of the cysts.

On the other hand, Shields Warren[5] in 1940 submitted an extensive study of the condition and concluded that cancer associated with chronic mastitis is 4.5 times as frequent as cancer in the population at large. He further states that no method is at hand to determine those lesions which will develop cancer and those which will not. He found that about 1 woman in 6, after the most obviously involved portion of the breast has been removed, will develop subsequent similar trouble, and 1 of every 29 develops carcinoma. However, he does not advise bilateral mastectomy in case of chronic mastitis or chronic cystic mastitis.

Cole,[6] in discussing the relationship of chronic cystic mastitis to malignancy, has this to say: "During the years when there has been so much dis-

Read before the Honolulu County Medical Society, Jan. 3, 1947.

1. Bloodgood, J. C.: Blue Dome Cyst in Chronic Cystic Mastitis, Its Relationship to Cure of Cancer, to Benign Lesions of Breast and to Educational Program, J.A.M.A. 93:1056 (Oct.) 1929.

2. Campbell, O. J.: Relationship between Cystic Disease of the Breast and Carcinoma, Arch. Surg. 28:1001 (June) 1934.

3. Lewis, D. & Geschickter, C. F.: The Relation of Chronic Cystic Mastitis to Carcinoma of the Breast, Surg., Gynec. & Obst. 66:300 (Feb.) 1938.

4. Vanden Berg, H. J.: Diagnosis and Therapeusis of Simple Cysts of the Breast, Surg., Gynec. & Obst. 83:2 (Aug.) 1946.

5. Warren, S.: The Relation of "Chronic Mastitis" to Carcinoma of the Breast, Surg., Gynec. & Obst. 71:3 (Sept.) 1940.

6. Cole, W. H.: Classification of Chronic Cystic Mastitis, Surg., Gynec. & Obst. 79:1 (July) 1944.

agreement and confusion in our conception of chronic cystic mastitis one very important point, however, has been clarified, namely, the relationship of chronic cystic mastitis to cancer of the breast. With practically no exception, all writers, surgeons and pathologists alike who have offered their opinion on the subject during the past few years have expressed their firm belief that cancer may and does develop in areas of chronic cystic mastitis even though there is as yet no means of determining just how often and in what types of chronic cystic mastitis this may occur."

Of particular interest to us locally is the comparative infrequency of the occurrence of breast lesions in Japanese. In an analysis of 308 breast lesions coming to operation at The Queen's Hospital during the past 5 years, 26 occurred in Japanese. Of these 26 tumors, 6 were carcinomas, 6 chronic cystic mastitis and 13 fibroadenomas. The 282 breast tumors occurring in other races consisted of 79 carcinomas, 113 in the general group of cystic mastitis and 70 fibroadenomas.

An analysis of 287 breast tumors of my own coming to operation showed that 27 occurred in Japanese, 9 of these being carcinomas, 6 chronic cystic mastitis and 10 fibroadenomas. There were 79 carcinomas in the other racial groups.

These figures are entirely too small to permit any definite conclusions. However, I believe that it is significant that chronic cystic mastitis, a supposedly precancerous lesion, was found in the Japanese breast slightly less frequently than carcinoma; while in other races chronic cystic mastitis was found much more frequently than cancer; approximately twice as frequently, in Caucasians. Fibroadenoma, on the other hand, a lesion without malignant significance, was found twice as often as chronic cystic mastitis in Japanese and approximately two-thirds as often in other races.

This small bit of evidence would seem to lend weight to the belief that chronic cystic mastitis is a precancerous lesion and that the relative infrequency of this lesion in Japanese may be one factor, at least, in the relative infrequency of cancer of the breast in this race.

It is evident from the opinions quoted above that no unanimity of opinion exists as to the relationship of cystic disease to cancer. It is my own personal belief that all women who develop cystic mastitis would be better off if both breasts were removed. The lesion is frequently bilateral, and at the time of operation it is generally quite evident that all involved tissue has not been removed. Whatever the associated incidence of malignancy may be—and I am inclined to believe that it is considerable—the possibility of this complication can only be completely eliminated by removing all breast tissue. Few women are willing to sacrifice one or both breasts when the possibility of malignancy subsequently developing is not great, and I can fully sympathize with this feeling. The loss of a breast, even though it has outlived its usefulness as a functioning organ, produces a psychological trauma of considerable proportions.

MASTALGIA (MAZODYNIA)

Mastalgia or mazodynia (painful breasts), similar to chronic cystic mastitis, probably has its origin in disturbed hormonal activity, the exact nature of which has not been clearly elucidated. It occurs most commonly between the years of 26 and 40 in single women or in married women who are of low fertility. The pain may be unilateral or bilateral and is usually accentuated in the premenstrual period. Tenderness is frequently most marked in the upper outer quadrant of the breast and is usually associated with a firm shotty or granular consistency of the organ. Pain, as is well known, is not commonly associated with carcinoma of the breast.

In these breasts, unless a tumor can be definitely palpated (and usually none can be) no definite therapy is indicated. Corpus luteum therapy may be tried but is usually unsuccessful. Geschickter says that the best form of endocrine therapy in all forms of chronic mastitis is pregnancy and lactation, and this should be encouraged whenever feasible.

BLEEDING

Bleeding from the nipple calls for adequate investigation because it is not infrequently associated with a precancerous lesion (intracystic papilloma). The lesion giving rise to this condition should be found, excised, and adequately investigated microscopically. Since a palpable tumor frequently cannot be demonstrated, the site of the lesion may be difficult to determine. Pressure over various aspects of the breast, watching for the appearance of the bloody secretion, frequently is a very definite aid in localizing the trouble. Transillumination of the breast may at times be of value. Such lesions usually do not lie far distant from the nipple. Adequate local excision, if no evidence of malignancy is found, is sufficient.

MASTITIS

Mastitis occurring at or near the time of puberty in either sex deserves mentioning. Due to the widespread information concerning tumors in this area, it is difficult and at times impossible to allay the fears of the parents regarding the situation.

Such tumors may be bilateral; they are frequently tender; and they occupy a position directly behind the areola. Such swellings spontaneously subside in due course of time, but it may become necessary to relieve the parents' anxiety by biopsy of such a lesion. In boys the tumor may be removed by an incision around the edge of the areola, preserving the nipple; in girls, a very small area may be removed for microscopic examination.

FIBROADENOMA

Fibroma or fibroadenoma is one of the common benign lesions of the breast. They occur usually in the younger age group and are characterized by being well circumscribed, quite firm and freely movable. Local excision suffices.

CARCINOMA

Cancer of the breast is a subject about which there is little difference of opinion at the moment. So long as surgery is the only adequate weapon at our disposal, early recognition of the disease followed by prompt radical surgery has been found to give best results. There are many factors influencing prognosis, such as age of the patient, duration of the disease, location of the lesion, lymph node involvement, the type of the lesion, etc.; but the only factor influencing the outcome in any given case is whether or not all the cancer cells have been removed. In general, the earlier and more thorough the operation, the more likely is this to be accomplished.

The whole problem of dealing with tumors of the breast, as with tumors elsewhere, revolves around the nature of the growth. The method of handling breast tumors that we have adopted, and this is in keeping with procedures in most places, is as follows:

All such individuals are referred into the hospital with the understanding that the tumor will be removed, and examined grossly and under the microscope, the extent of the operation to depend upon these findings. Probably all lesions should be biopsied even though the clinical evidence seems to leave no doubt as to the tumor being malignant. Fat necrosis and some chronic inflammatory lesions may give a picture that can not be distinguished from malignancy except by the microscope. Radical mastectomy, like permanent colostomy, has many undesirable features that should only be inflicted on an individual as a life saving measure. When the tumor has been removed, the cavity is swabbed out with alcohol and obliterated with interrupted silk sutures. If the combined gross and microscopic examination indicates that the lesion is malignant, gloves, gowns, drapes and instruments are changed and the radical operation is performed.

No detailed description of a radical breast amputation will be indulged in at this time. However, a few points may be emphasized with profit. All operations are done under cyclopropane anesthesia. Preparation of the thigh for skin grafting by use of the Padgett dermatome is routinely done so that there will be no tendency to make an inadequate removal of skin. All cases of radical resection are transfused during the course of the operation. Silk is used throughout and the wounds are routinely drained.

All structures lying between the brachial vessels above and the rectus sheath below, and between the latissimus dorsi and subscrapularis muscles laterally and the midline, and posterior to the chest wall and serratus anterior muscle are removed with the exception of the long thoracic and thoracodorsal nerves, and these may be removed if involved in metastasis.

Postoperatively a large fluffy dressing is used and pressure is applied, particularly over the axilla, to prevent serum and blood accumulating in this area. Patients are encouraged to be up and about as soon as possible and they are instructed in the early use of the involved arm.

Only postoperative irradiation is used, and only in cases showing axillary lymph node involvement. The one postoperative complication aside from recurrence that gives the greatest amount of trouble is swelling of the arm, and I know of no adequate method to guard against this except to prevent infection, nor of any satisfactory treatment once this occurs.

CONCLUSIONS

In conclusion I wish to emphasize:

1. The absolute necessity of removing and adequately examining all breast tumors without delay.

2. Radical resection of the breast at the same time, when the tumor is malignant.

The Clinic, 881 So. Hotel St.

The Racial Incidence of Prostatism in Hawaii

A PRELIMINARY REPORT

K. B. CONGER, M.D.
HONOLULU

THIS study was the result of an effort to ascertain the comparative racial incidence of prostatism in the Oriental and Caucasian races, under similar standards of medical diagnosis and treatment.

SELECTION OF CASES

Cases selected for this study consisted of 172 consecutive patients on the island of Oahu with complaints of prostatism severe enough to cause their hospitalization in any of the three general hospitals in Honolulu.

DIAGNOSIS OF PROSTATISM

Cases were admitted to this series in which a diagnosis of (1) benign prostatic hypertrophy, (2) carcinoma of the prostate, or (3) vesical neck contracture had been made by operation, autopsy, or cystoscopic and rectal examination.

STATISTICAL ANALYSIS

In order to arrive at the true incidence of the various types of prostatism among the various racial groups, the numerical strength of each racial group on the island of Oahu was taken from the 1940 census. Only males over 50 were counted, in order to provide a true statistical picture of the population group from which the cases of prostatism were drawn. The following chart indicates the racial distribution of cases of prostatism in comparison with the racial distribution of a corresponding age and sex group of the population.

TABLE 1.—*Racial incidence of prostatism in Hawaii.*

	Number of males over 50	CASES OF PROSTATISM			INCIDENCE PER 1000			
		BPH†	Carcinoma	VNC§	BPH†	Carcinoma	VNC§	TOTAL
Caucasian	4,345	87	13	3	20.0	2.9	23.7	23.7
Chinese	2,345	24	1	1	10.2	0.43	11.1	11.1
Filipino	660	5	1	0	7.6	0.0	9.1	9.1
Others*	1,240	6	0	1	4.8	0.8	5.6	5.6
Japanese	6,947	21	4	2	3.0	0.29	3.9	3.9
Hawaiian and part-Hawaiian	1,392	3	0	0	2.1	0.0	2.1	2.1

* Includes Puerto Rican, Korean, Negro, and miscellaneous.
† Benign prostatic hypertrophy.
§ Vesical neck contracture.

CONCLUSIONS

The figures indicate that the Caucasian race has the highest incidence of all three types of prostatism. The small number of Filipinos in the series, and the varying mixtures of races under "Others" and "Hawaiians and Part-Hawaiians," make the statistics in these racial groups insignificant.

In this series the relative racial incidence of prostatism among Caucasians, Chinese, and Japanese was 6:3:1.

Summary of a paper read January 17, 1947, before the Honolulu Surgical Society.

The Role of Adduction Insufficiency in Reading Problems

PHILIP M. CORBOY, M.D.
HONOLULU

THE IMPORTANCE of a full evaluation of the role the internal rectus muscles of the eyes play in comfortable and profitable reading pleasure cannot be overlooked any more by the general practitioner in medicine today than by the ophthalmologist who is concerned with it in his daily practice.

The symptoms that arise from adduction insufficiency are many, and are classical in their appearance. The first symptom is the inability to read comfortably more than a few minutes; concentration on the matter at hand seems to be lost. This first symptom does not improve, and the time limit of comfortable reading does not lengthen. The next symptom is described as a "running together of print." This arises after the fatigue point is reached, and it may amount to a frank blurring of the type. The next symptom and probably the best known is drowsiness, which is not based on a lack of sleep, but is nature's way of closing the mal-functioning eyes. This latter symptom does not improve with time or repetition of the reading matter, and is most troublesome. Lastly there develops often a mild headache which is usually located in the frontal area between the eyes, and which is directly referable to the exhausted internal rectus muscles.

PHYSIOLOGIC CONSIDERATIONS

A detailed anatomical description of the internal rectus muscles will not be given in this paper; however, a few points of interest in their physiology are in order so that we may properly understand, later on, their true importance in the solution of the reading problems to be presented at this time.

The primary function of our internal rectus muscles is adduction, or turning of the eye or eyes inward from the parallel axes the eyes assume in fixing on infinity. There are other functions, such as rotation of the eyes when they are in other than the plane mentioned above, but of chief importance in this discussion is the adduction they perform.

As man has evolved along the developmental plane from early days in history, the task these muscles have to perform has grown tremendously, to the present day, when it is not uncommon to find tasks that require hour after hour of a long day of convergence. So, it is much more a problem today than, say, fifty years ago, when their importance in ophthalmology was beginning to be recognized.

A word or two should be mentioned in regard to the relationship of convergence to accommodation. In general the two go hand in hand: i.e., when the eyes converge on an object, accommodation takes place, with contraction of the pupil. However, there are many exceptions to this usually accepted rule. Some of these exceptions are important and should be briefly mentioned for a proper understanding of this subject.

1. First, there is a condition of congenital lack of accommodation, which, though rare, does occur; here we can find convergence without accommodation.
2. Accommodation can occur independently without convergence of the internal rectus muscles in such well known cases as:
 a. Involvement of the internal rectus muscles in lesions of the third cranial nerve, e.g., paralysis or paresis.
 b. In the newborn: many babies can accommodate long before convergence is developed.
3. Many people are able to develop the ability of converging without accommodating, and this is done by voluntary control.
4. In presbyopia, or the failure of accommodation that occurs naturally in older people, convergence continues quite independently of the accommodative ability of the eyes.

What are some of the problems involved in the normal function of the internal rectus muscles? Like the present day motorist who before setting out for a drive must have so many prerequisites, such as driving knowledge, licenses, insurance, et cetera, so our internal rectus muscles are beset by many obstacles the consideration of which is important at this step of the discussion. They are:

1. The strength of the external rectus muscles opposing the internal recti is of paramount importance, just as your credit balance in the bank depends upon the amount of debits against it.

2. The second problem involved in the normal function of the internal recti is: with the eyes at rest, what anatomical position do they assume? Do the eyes turn in or out slightly? If this amount of turning in or out is slight, and not enough to cause diplopia or double vision, then it is known as a phoria. If the eyes turn out it is known as exophoria; if in, esophoria. When the eyes at rest lie in parallel planes, and no deviation is present, orthophoria is said to exist. If exophoria is present, it can be readily seen that this is a hindrance to convergence, since the amount of exophoria present,

as well as the power of the external recti, must be overcome by the internal recti. In cases of high degrees of exophoria, the latter is of great importance. Conversely, if the condition of esophoria or turning in is present, then this is an advantage to the internal recti, as the eyes anatomically turn in slightly and this aids convergence. It is a commonly accepted finding that people with high esophoria have few or no reading problems. Reiterating, the second obstacle to good internal rectus function is the amount of exophoria that may be present.

3. The third problem facing internal rectus function is the state of accommodation, and also the errors of refraction that excessive accommodation may be required to overcome. We do not all have well-developed accommodation; it can be developed by training and exercise. Since ordinarily, convergence and accommodation go hand in hand, a patient with poor accommodation will have difficulty in performing close functions. This poor accommodation impedes good convergence also. The amount of accommodation present is measured by the Prince Rule, which consists of determining the shortest distance from the eye at which an object can be kept focused clearly. This distance is greatest in youth and decreases with age, usually failing after fifty-five or sixty. In hyperopia (farsightedness) that is not corrected by glasses, excessive accommodation is necessary, so the correcting of existing errors of refraction is important in relieving over accommodation.

4. The fourth of the obstacles that the internal recti meet is the individual's occupation. Hence a watchmaker using his eyes seven or eight hours a day at difficult tasks requires a tremendous amount of convergence; while a lookout on board the bridge of a ship in the same length of time, who is constantly scanning the horizon, will use little or no convergence. So the individual's occupation is an important factor that cannot be overlooked in the analysis of internal rectus function and the solution of reading problems.



Double Rotary Prism Unit with Zero Graduation Horizontal.

Double Rotary Prism Unit with Zero Graduation Vertical

FIG. 1. Rotary prism units.

CLINICAL EVALUATION

At this juncture, an explanation of the method of determining the strength of an ocular muscle is in order. Inasmuch as this paper is not intended for the ophthalmologist, no detailed physiological-optical explanation will be used, but as simple a description as possible. The standard practice today is: An eye or eyes are directed at an illuminated object held at approximately 33 cm. in front of the eyes, and between the object and the eye or eyes is placed one or a pair of rotary prisms (Fig. 1). The general principle that the apex of the prism points to the muscle being stimulated was discovered by Risley many years ago. Hence the amount of prism that the eye muscle is able to overcome without seeing a double image is the index of its strength. This is expressed in prism diopters or commonly in degrees. Hence, it is easy to quickly determine the prism strength the external recti can overcome, as well as the strength of the internal recti. No two people have the same degree of muscular strength, but in this day and age with the uses we put our eyes to, it is agreed that the power of the internal recti should be two or more times that of the external in order that a comfortable reserve of convergence be at hand. Today, the ophthalmologist uses a phorometer or apparatus containing two rotary prisms plus the addition of Madox-rods to test the two eyes simultaneously (Fig. 2).

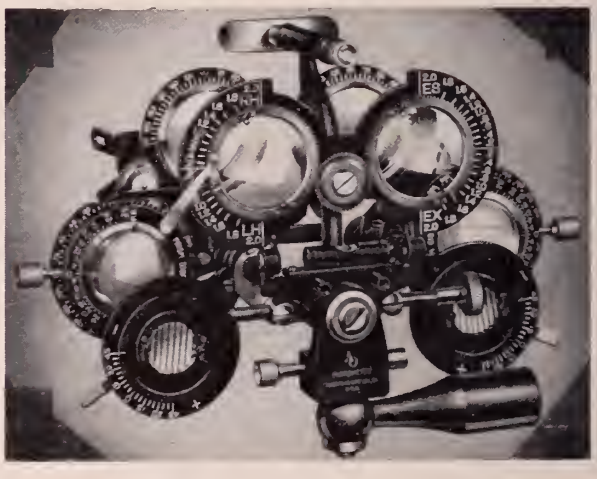


Fig. 2. Improved A. O. phorometer.

TREATMENT

Up to this point, we have considered the function of the internal rectus muscles and many of the obstacles that present themselves to the proper carrying out of this function. It was mentioned that the strength of the internal recti should be two or more times that of the external. This is more or less universally agreed to; and the greater the ratio of the internal over the external recti, the less the problem of convergence. This principle is used in treatment, i.e., we attempt to overdevelop the internal recti, so as to offset excessive divergence or a high exophoria if it should exist. When a normal amount of convergence is present, but an abnormal amount of divergence is present, the condition is referred to as divergence excess. When a normal amount of divergence is present but a poor or underdeveloped amount of convergence is present, the condition is known as adduction insufficiency. Hence, as just mentioned,

the treatment is ordinarily directed to developing a convergence or adduction excess. Some of the methods of developing convergence or adduction will be mentioned before taking up or considering specific clinical cases.

The present day ophthalmologist has a number of devices and equipment designed specifically for the training of the extraocular muscles and a detailed description of them at this point would be tiring; however, the strides that have been made in this field, known as orthoptics, in the past twenty years, constitute one of the noteworthy advances in medicine, and it is now becoming recognized as one of the "specialties within a specialty." The training of technicians in this field is broadening daily. In the present day instrument the ophthalmologist is able to bring the eyes to a clear focus on either a fixed or moving target or object, to control the illumination on each eye, and to stimulate the fovea or macula lutea, also to stimulate the exact muscle or muscles that he finds needing help. He is also able to develop fusion, or the using of both eyes simultaneously, and the development of the third dimension or depth perception. Hence if a problem of poor convergence and accommodation is presented to him, he can develop both to a high degree in a relatively short time. Conversely, he is able to develop divergence in cases of excessive convergence. The giving of orthoptic training has become an important part of the ophthalmologist's practice today, and will continue to become more so in the future. Treatments are best given daily, although three times a week is usually sufficient to bring about good results. The psychological value of the treatments is high, as the patient is able to see his progress from week to week. Cases that do not respond to orthoptic treatment or that do not make progress after a serious attempt has been made are afforded much relief by surgery; but it is not within the scope of this paper to discuss that entity, as in reading problems we are dealing with the minor variations from the normal rather than the extreme. The following case reports will bring out rather typical reading difficulties that occur from day to day. A graph will be presented following each case showing the progress made in the development of adduction over a period of training.

CASE REPORTS

CASE 1. D. M., a 13 year old white girl, an eighth grade student, was first seen on January 26, 1946. She had never worn glasses, and complained that reading and studying made her eyes tired and that she was unable to keep the print clear long and soon felt sleepy. She was refracted and found to have no appreciable error of refraction. Her vision was normal. At 33 cm. she had orthophoria, i.e., no deviation from the normal. Her abduction or divergence was 18, her adduction 12. This was diagnosed as an adduction insufficiency, and she was placed under treatment that week. In order to set a goal of efficiency for her internal recti, it was deemed advisable that she should reach an adduction of at least twice her abduction, 2 x 18 or 36. Her graph follows and on March 6, 1946, she was discharged free of symptoms. Treatments were given three times weekly.

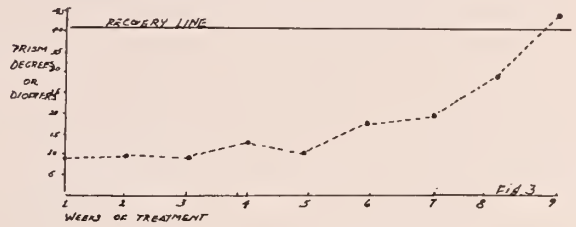


FIG. 3. Progress of D. M., a 13-year-old white female, over a nine week period.

CASE 2. D. T., a 15 year old white girl, who had been wearing glasses about nine years, was found to be fairly myopic or nearsighted, and her vision corrected with glasses was 20/25 or slightly less than normal. After a new correction was prescribed her vision was normal. Her chief complaint was that with or without her glasses she was having difficulty in reading. The print seemed to blur, she could not read more than a few minutes at a time, and afterward the eyes would tire and she would see slightly doubled images. Her abduction was stronger than normal—24—and in addition to this she had an exophoria of 8 degrees, which further burdened her internal recti. Her adduction was only 8. This is an extreme case of adduction insufficiency. Treatment was begun in February three times weekly, and by April 3, 1946, she was symptom free and had developed an adduction of 49 and was discharged.

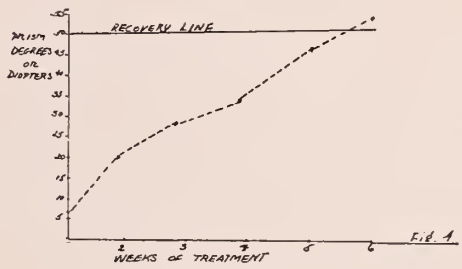


FIG. 4. Progress of D. T., a 15-year-old white female, over a six-week period.

CASE 3. G. S., a white man aged 26, a missionary, and doing mostly clerical work, had never worn glasses, but reading was difficult and caused extreme drowsiness. His vision was normal. He was refracted and found to have little or no error of refraction, and no glasses were ordered. Muscle examination showed abduction 12, adduction 6. This is an inverted ratio of 2:1. Treatment was begun four times a week, on January 18, 1946. By February 15, 1946, he had developed his adduction to 36, or three times his abduction, and six times the amount of adduction at the beginning of treatment. He was symptom free and was discharged.

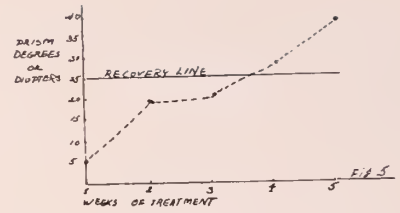


FIG. 5. Progress of G. S., a 26-year-old white male, over a five-week period.

CASE 4. S. C., a white woman aged 21, a clerk, was first seen on February 2, 1946, complaining of headaches after half an hour of reading, also difficulty with reading, and extreme drowsiness while trying to do any reading. Her vision was nearly normal in each eye, but a refraction revealed a small error which was prescribed for. Her muscle examination revealed abduction 12, adduction 12. This is a ratio of 1:1 which gave her no reserve. Treatment was begun and four weeks later, taking three treatments a week, her adduction was 42 or nearly four times her abduction. All symptoms were gone and she was discharged.

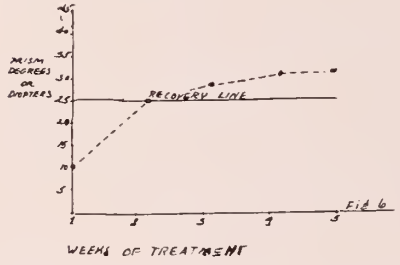


FIG. 6. Progress of S. C., a 21-year-old white female, over a five-week period.

CASE 5. M. C., a white woman age 40, a librarian, complained of headaches after close work. She was unable to read more than a few minutes. Vision was normal in each eye. Patient was refracted and found to have no appreciable error of refraction. Muscle examination showed: abduction 16, adduction 12, exophoria 3. This gave her internal recti an obstacle of 19 to overcome with a reserve of only 12 at hand. Diagnosis: Adduction insufficiency. Treatment was begun on February 20, 1946, three times weekly; and on March 29, 1946, or six weeks later her adduction was 40, with all symptoms gone. She was discharged.

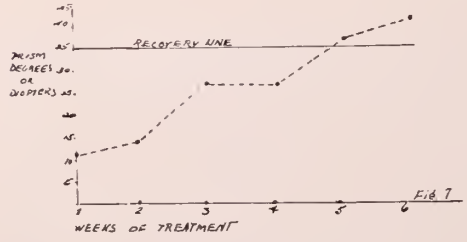


FIG. 7. Progress of M. C., a 40-year-old white female, over a six-week period.

CASE 6. C. C., a white woman age 33, a housewife, had been wearing glasses for 18 years and complained of headaches and drowsiness after reading. She could not read more than a few minutes without development of symptoms. Her vision was brought to normal with a new correction. Her muscle examination revealed abduction 24, adduction 10. Diagnosis: Adduction insufficiency with mild divergence excess. Patient was treated three times weekly and began treatment on February 28, 1946. By March 28, 1946, one month later, her adduction had reached 36 and her symptoms were gone. She asked to be excused from further treatments, which might have developed her adduction much higher.

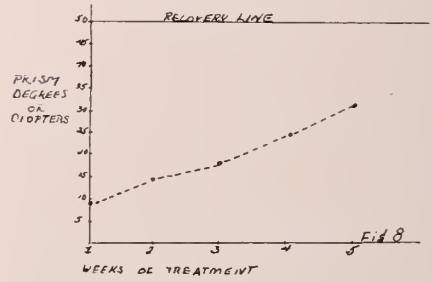


FIG. 8. Progress of C. C., a 33-year-old white female, over a five-week period.

COMMENT

Many more cases could be used to illustrate the points of this paper; however, the cases cited are typical of those seeking relief for reading problems. It is noteworthy that no presbyopes are among the patients cited above, as most patients in the older age groups depend entirely on spectacles to aid their near vision and the near point of convergence is rarely less than 33 centimeters. It is also true that the older patients do not accept orthoptic training readily, as the muscular fatigue development brought about by the treatments is very troublesome and they soon discontinue treatment.

CONCLUSION

The role of adduction insufficiency in reading problems has been presented in a simplified form; and barring congenital and pathological entities listed previously, it appears as the most common cause of reading difficulties at all ages.

The symptoms of not being able to read more than a few minutes, of blurring of print, of drowsiness, of occasional splitting of print, and of headaches were mentioned as those most frequently met with.

The methods of diagnosing and treating this condition have been discussed, and six typical cases illustrating it have been presented.

565 Young Hotel Building.

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[EDITORIALS]

SOCIALIZED MEDICINE—PRO AND CON

The following letters—from a teacher to a Honolulu physician, and the physician's reply—are published for two purposes.

First, to show overly confident members of the profession that our fight against government intervention into medical practice hasn't convinced every thinking person; and to show them, too, what some persons, at least, think is wrong with some doctors.

Second, to show doctors, and others as well, an example of a disturbing modern trend away from the time-honored practice of self-help, toward the collectivist attitude that *the government should be appealed to whenever a problem arises.*

Dear Sir:

I received this morning your form letter suggesting that I write my legislators to voice my opposition to the health insurance plan. However, as I agree neither with your premises nor with your conclusions, I will, in response to your letter, do exactly the opposite.

The most forceful argument I have yet met—personally—for socialized medicine is that of my parents, who are now losing their life savings—which never have been too great because of the drain of previous medical charges — through the treatment of a cancer in my mother. Should she be cured they will have no money left upon which to live. Previously, however, having paid the entirely preposterous charges made by members of your profession for simple, normal child delivery, I was convinced that the medical profession was, through its overcharging, putting itself in the luxury class, thereby denying the more humble groups of citizens access to medical care. Consequently I have always been for socialized medicine.

You argue that if the incentive of payment is removed, the doctors will do poor work. In other words, it is only avarice and greed that drive the doctors to do passable work. To me that is a most remarkable confession, and a most sad commentary upon your professional ethics. What manner of men are you? Do you not take a much-lauded oath to minister to the welfare of mankind? I know that we in the teaching profession do our best to do our teaching and our research well, not because we are motivated by personal greed or private aggrandizement, but because we feel personal satisfaction in a good job well done, and because we feel it is our debt to society.

However, I personally suspect that the standards of the medical profession will not fall far from their present low levels. As far as I can determine, the only standards rigorously upheld by the profession are those of training, and I suspect that those are not maintained entirely for high standards but to prevent too much competition. As to the practicing standards, I know, as you must also, many examples of malpractice, of professional incompetence, of slipshod diagnosis and treatment. And I know that these cases, when brought before other members of the profession, are defended for fear that the entire profession might be tarred with the same brush. Consequently, I feel that if anything the standards of the profession might be raised through a group health plan.

I understand your position: were I a doctor with a profitable practice I might too fight the

(Please see Next Page)

bill. But I suspect that later or sooner the fight you put up will be a losing fight, and that you may as well resign yourself to socialized medicine within this generation. I hope so.

Yours sincerely,

(NAME DELETED)

April 1, 1947.

* * *

Dear Mr. ———,

I wish to thank you for your frank letter in which you express your approval of compulsory taxation for sickness costs. You are, of course, entitled to your opinion and, thanks be, still have, in America, your right to express it. I am answering it because it is the only response of its kind I have received—although I am sure that there are many others who hold your views.

If one were to concede, for the sake of argument only, that your hardly complimentary opinion of doctors and the medical profession in general is justified, do you really believe that you or your family would fare any better if medical care were to be administered through a bureaucratic agency of the government? If you do, I would refer you to the record of the Veterans Administration in this field over the past twenty-five years—or to any comparable experiences in government administered care to the sick in this country or others.

I hesitate to believe that you believe doctors, generally speaking, are impelled more by greedy and avaricious motives than are teachers or lawyers or mechanics or housemaids. The less admirable traits, it seems to me, are pretty well distributed, as are the good ones. My observation among my colleagues leads me to believe that their humanitarian impulses, their great desire to do their work in the best way possible to relieve suffering and prolong life, by far outweigh such selfish motives as they, being humans, share with the rest of their species. Undoubtedly, however, there is an additional powerful incentive in a doctor's knowledge that he must exert his best efforts to give top-notch service if he is to please and keep his patient and have that patient refer other patients to him,—an incentive which might not be so potent if the patient were just a number on his assigned panel and it were three o'clock in the morning.

One of the things which makes members of the medical profession skeptical about state medicine is observation of what is happening or has happened to another noble profession—your own. You must be aware that except to the self-sacrificing type of individual, of which there are too few, there is little or no incentive for young men or women of ability to enter the teaching profession anywhere in the United States today. And from their comments, it is so apparent what has happened to many in that profession—they talk of "luxury classes" to which they don't belong, and charge those so-called luxury classes with denying to more humble groups (with which they identify themselves) access to adequate medical care, and porterhouse steaks, and new Easter bonnets.

And since able persons are not generally attracted these days to the teaching profession, for selfish reasons, if you would have it so, and those who do join up soon find themselves feeling sorry for themselves, not only because they have too few of the luxuries of life but because they have to teach 40-odd children instead of 26,—since these things are so, the quality of teaching deteriorates, as you must know.

The medical profession *does* want such conditions to be maintained (and the financial is one of the lesser of these) that it will continue to attract the highest kind of talent,—that will permit that talent to function in such a way that the highest type of medical care may be available to all. Socialized medicine does not offer this.

It is apparent that you are poorly informed in regard to financial returns from the practice of medicine, and in regard to the measures which the profession, far more than the State, takes to maintain and improve standards of practice. Believing that you have an open mind, I should be glad to discuss this with you at your convenience. Of course I do not know what you paid for obstetrical services, but it might surprise you to know and perhaps lead you to consider your obstetrical bills in a different light if I were to tell you that three-fourths of my usual charge for an obstetrical case represents overhead professional expense which I must meet, and that one-fourth is my net, before taxes.

Are you aware that none of the reports on the costs of medical care, even those assembled by the socializers,—has pointed to the medical profession as overpaid?

The problem that we all admit and are equally anxious, with you, to solve is the distribution of the costs of medical care. Wouldn't you rather have it solved on a voluntary basis than on a compulsory governmental basis with all the proved dangers of the latter?

Thank you again for your letter and for the opportunity to comment on your views. Mutual understanding of each other's problems and willingness to grant that the other fellow's motives aren't all bad will go far toward arriving at the best solution, for all, of these perplexing questions. Please believe me when I say that the medical profession *does* understand your sickness cost problems, and is exerting its efforts to bring to such problems solutions which will work the greatest good for all.

Sincerely,

(NAME DELETED)

April 7, 1947.

THE PRACTICAL NURSE IN HAWAII

The practical nurse is becoming an important integral factor in medical and nursing care programs in all parts of the United States of America. For this reason, a widespread and urgent need is currently being felt for training and licensing this large group of workers. Many states are now considering laws to this effect, although only New York State and the Territory of Hawaii have actually passed laws requiring the licensure of all who nurse for hire. This is a forward step in the improvement of nursing care for the public and the protection of all who use the services of practical nurses in any way. We can well be proud that Hawaii has joined New York in seeing the need for training and regulation of this group which is assuming greater and greater responsibility for care of the sick.

The Board for the Licensing of Nurses of the Territory of Hawaii has established rules and regulations for the education and licensing of practical nurses to supplement the Nurse Practice Act (103 S.L.) of 1945. This law makes the Board responsible for setting up standards and policies for the training, supervision, and licensing of all who nurse for hire (professional nurses, practical nurses, attendants, aides, and orderlies). Those persons who are not actually carrying out recognized nursing procedures, such as porters, office secretaries, etc., are not covered by the Act.

It is hoped that schools for practical nurses will soon be established in the Territory, so that well-trained practical nurses will be available in increasing numbers. In the meantime, practical nurse licenses are being granted, under waiver, to all who meet the minimum qualifications of age, experience and satisfactory recommendation from employers. This arrangement will continue until sufficient trained practical nurses become available.

Additional information and copies of the Law may be obtained from the Board for the Licensing of Nurses at the Mabel Smyth Memorial Building.

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PARASITES OF DOMESTIC ANIMALS IN HAWAII

An article by Joseph Alicata in the second issue (April, 1947) of *Pacific Science* describes in detail the various parasitic infestations known to occur in domestic animals in Hawaii. Many of these are of course of medical significance: the tapeworms, the roundworms, some of the flukes, some of the arthropods (ticks, e.g.), and so on. A convenient summary is appended in the form of a tabulation, animal by animal and parasite by parasite, for ready reference.

This second issue of *Pacific Science* maintains the same high standards as the first. It is an interesting and valuable journal, and doctors would do well to subscribe to it, not only for the occasional paper of direct interest to them professionally, but for its general educational value.

* * *

WHAT DOES THE SPINAL FLUID SHOW?

What does the spinal fluid show? Any doctor who *begins* treatment for syphilis (other than primary or secondary) without being able to answer this question is guilty of carelessness. Any doctor who *dismisses* a patient from treatment without being able to answer it, is guilty of serious negligence. The only syphilitic patients who do not need a spinal fluid examination are those who are too old or too ill to be subjected to treatment for neurosyphilis anyway. Every other patient with syphilis *must* have a spinal fluid examination either before or right after his series of treatments.

The reason is simple enough. *Neurosyphilis cannot be ruled out by a physical examination.* A patient may show no physical or neurological abnormalities whatever, and yet have a four plus spinal fluid Wassermann with a high cell count, high protein, increased globulin, and markedly elevated mastic or gold sol curve—an urgent indication for combined fever and penicillin treatment. Arsenicals and bismuth cannot be expected to help such cases materially, and valuable time will be lost if the doctor—ignorant of the spinal fluid findings—puts them on routine chemotherapy *or ordinary doses of penicillin* before doing a spinal tap. Worse still, if the doctor merely treats such a patient in more or less routine fashion, and never does a spinal tap, that patient stands an excellent chance of becoming insane, blind, or crippled with tabes, some time during the next few months or years. And the doctor will, by virtue of his negligence, be directly responsible for such a tragedy if it occurs.

Nothing can justify failure to examine the spinal fluid. It is better not to accept a patient for treatment at all, than to run the risk of doing harm by under-treating a case of asymptomatic neurosyphilis. It is the doctor's responsibility to persuade the patient that the spinal fluid must be examined, and, if he is unwilling or unable to do a spinal tap himself, to send the patient elsewhere to have the examination made. Optic atrophy, paresis, and tabes dorsalis are serious matters. Don't add to their incidence!

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RECENT ACQUISITIONS

Anesthesia

Adriani, John *Techniques and procedures of anesthesia.* c1947. (gift of publisher).
Pitkin, G. P. *Conduction anesthesia.* c1946.
Raper, H. R. *Man against pain.* c1945. (gift of Dr. Chauncey Leake).

Biography

Fulton, J. F. *Harvey Cushing, a biography.* c1946. (gift of Dr. James R. Judd).

Circulatory System

Carter, J. B. *The fundamentals of electrocardiographic interpretation.* c1937. (gift of Dr. N. M. Benyas).
Dressler, Wilhelm *Klinische elektrokardiographie.* c1937. (gift of Dr. N. M. Benyas).
Friedman, Meyer *Functional cardiovascular disease.* c1947.
Lewis, Sir Thomas *Clinical electrocardiography.* 6th ed. 1937. (gift of Dr. N. M. Benyas).
Maher, C. C. *Electrocardiography.* 2nd ed. c1937. (gift of Dr. N. M. Benyas).
Pardee, H. E. B. *Clinical aspects of the electrocardiogram.* 2nd ed. rev. c1928. (gift of Dr. N. M. Benyas).

Diet

Rose, M. S. *Foundations of nutrition.* 4th ed. rev. c1944.

Gynecology and Obstetrics

Beck, A. C. *Obstetrical practice.* 4th ed. c1947.
Lull, C. B. *Control of pain in childbirth.* 2nd ed. c1945.
Novak, Emil *Gynecological and obstetrical pathology.* 2nd ed. c1947. (gift of publisher).
Stander, H. J. *Textbook of obstetrics* (Williams obstetrics) 9th ed. rev. c1945. (gift of publisher).

Neurology and Psychiatry

Ford, F. R. *Diseases of the nervous system.* 2nd ed. c1945.
Karpman, Ben *Case studies in the psychopathology of crime.* v. 2. c1944. (gift of publisher).
Tilney, Frederick *The form and functions of the central nervous system.* c1920. (gift of Dr. A. L. Craig).

Ophthalmology

Tassman, I. S. *The eye manifestations of internal diseases.* 2nd ed. c1946.

Pediatrics

Davison, W. C. *The compleat pediatrician.* 5th ed. c1946.

Pharmacology and Therapeutics

American Pharmaceutical Association. *The national formulary.* 8th ed. c1946. (gift of publisher).
Cushny, A. R. *Pharmacology and therapeutics.* 13th ed. rev. c1947.
Gutman, A. B., ed. *Modern drug encyclopedia.* 3rd ed. c1946.
Pijoan, Michel *A handbook of commonly used drugs.* c1947. (gift of publisher).

Proctology

Bacon, H. E. *Anus, rectum, sigmoid colon.* 2nd ed. c1941.

Public Health

Smillie, W. G. *Public Health administration in the United States.* 2nd ed. c1940.

Roentgenology

Hodges, F. J. *Radiology for medical students.* c1947. (gift of publisher).

Tuberculosis

Clark, K. C. *Mass miniature radiography of civilians.* 1945.
Cummins, S. L. *Primitive tuberculosis.* 1939.
Gloyne, S. R. *Social aspects of tuberculosis.* 1944.
Heise, F. H., ed. *1000 questions and answers on T. B.* c1941.
Maxwell, James *The care of tuberculosis in the home.* 1943.
Maxwell, James *Introduction to diseases of the chest.* 2nd ed. 1944.
Omerod, F. C. *Tuberculosis of the upper respiratory tract.* n. d.
Sekulich, Milosh *What is tuberculosis?* c1944.
Wilkinson, M. C. *Non-pulmonary tuberculosis.* 1942.

Miscellaneous

Berg, R. H. *The challenge of polio.* c1946.
Cooke, R. A. *Allergy in theory and practice.* c1947. (gift of publisher).
Cunningham, B. V. *Psychology for nurses.* c1946. (gift of publisher).
Hall, V. E., ed. *Annual review of physiology.* v. 9. 1947.
Lederer, F. L. *Diseases of the ear, nose and throat.* 5th ed. c1946.
Lind, A. W. *Hawaii's Japanese.* c1946. (gift of publisher).
Quarterly cumulative index medicus. v. 39. Jan.-June 1946. c1947.
Selye, Hans *Encyclopedia of endocrinology.* v. 7. c1946.
Smith, Sydney *Forensic medicine.* 8th ed. 1945.
Titus, Paul, ed. *Directory of medical specialists.* v. 3. 1946.

CURRENT JOURNAL SUBSCRIPTIONS

In the November-December 1944 issue of the Journal we published a list of 125 journals then being currently received in the Library. Since then our subscription list has been enlarged, the Journal has acquired new exchanges, and in addition to a few gift subscriptions, our journals now total 230. We decided it was timely to publish a new list and hope you will find it convenient to refer to whenever you wish to know what journals are available at the Medical Library.

Abstracts of World Medicine
Abstracts of World Surgery, Obstetrics and Gynaecology
Acta Tropica
Alcohol Hygiene
Alii Elele (gift of Queen's Hosp.)
American Heart Journal
American Journal of Anatomy
American Journal of Clinical Pathology (gift of Dr. Tilden)
American Journal of Diseases of Children
American Journal of Hygiene
American Journal Medical Sciences
American Journal of Medical Technology
American Journal of Medicine
American Journal of Nursing (gift of Nurses' Association)
American Journal of Obstetrics and Gynecology
American Journal of Ophthalmology
American Journal of Pathology
American Journal of Physiology
American Journal of Psychiatry
American Journal of Public Health
American Journal of Roentgenology and Radium Therapy (gift of Dr. Smith)
American Journal of Surgery
American Journal of Syphilis, Gonorrhea and Venereal Diseases
American Journal of Tropical Medicine
American Medical Association News
American Medicine and the Political Scene
American Review of Soviet Medicine
American Review of Tuberculosis (gift of Nat. Tub. Assoc.)
Anesthesiology
Anales Facultad de Medicina de Montevideo
Annals of Internal Medicine (gift of Dr. Arnold, Sr.)
Annales Medicinae Internae Fenniae
Annals of Otology, Rhinology and Laryngology
Annals of Surgery
Annals of Tropical Medicine and Parasitology
Annals of Western Medicine and Surgery
Archives of Dermatology and Syphilology
Archives of Disease in Childhood
Archives of Internal Medicine
Archives of Neurology and Psychiatry
Archives of Ophthalmology (gift of Clinic)
Archives of Otolaryngology (gift of Clinic)
Archives of Pathology (gift of Clinic)
Archives of Physical Medicine
Archives of Surgery (gift of Medical Group)
Army Medical Library News
Australian and New Zealand Journal of Surgery
Blood
Borden's Review of Nutrition Research
Brain
British Journal of Ophthalmology
British Journal of Pharmacology and Chemotherapy
British Journal of Surgery
British Journal of Tuberculosis and Diseases of the Chest
British Journal of Urology
British Medical Journal
Bulletin of the American College of Surgeons
Bulletin of the History of Medicine (gift of Dr. Pleadwell)
Bulletin of the Creighton University School of Medicine
Bulletin of Hygiene
Bulletin of the Johns Hopkins Hospital
Bulletin of the Los Angeles Neurological Society
Bulletin of the Medical Library Association
Bulletin of the Medical Society of the County of Kings and Academy of Medicine of Brooklyn
Bulletin of the Menninger Clinic
Bulletin of the National Tuberculosis Assoc. (gift of Nat. Tub. Assoc.)
Bulletin of the New England Medical Center
Bulletin of the New York Academy of Medicine
Boletin of the Oficiana Sanitaria Panamericana (gift of U. S. Public Health Service)
Bulletin of the San Diego County Medical Society
Bulletin of the San Francisco County Medical Society
Bulletin of the School of Medicine, University of Maryland
Bulletin of the U. S. Army Medical Department
Calcutta Medical Journal
California Medicine
Canadian Hospital
Canadian Medical Association Journal
Cancer Research
Chemical Reviews
Chinese Medical Journal
Cleveland Clinic Quarterly
Clinical Medicine
Clinical Science Incorporating Heart
Clinics
Connecticut State Medical Journal
Current List of Medical Literature
Dallas Medical Journal
Delaware State Medical Journal
Diabetes Abstracts
Digest of Neurology and Psychiatry
Digest of Treatment
Diseases of the Chest
Drug Vitamin and Allied Industries
Edinburgh Medical Journal
Endocrinology
Fichero Medico Terapeutico
Gastroenterology
General Practice Clinics
Guthrie Clinic Bulletin
Hawaii Health Messenger
HAWAII MEDICAL JOURNAL
The Hospital (gift of Hosp. Assoc.)
Hospital Corps Quarterly
Hospital Management (gift of Hosp. Assoc.)
Hospital Progress
Hospital Survey
Hospitals
Human Fertility
Hygeia
Illinois Medical Journal
Indian Medical Gazette
Industrial Medicine
Industrial Nursing (gift of Nurses' Assoc.)
International Journal of Leprosy (gift of Dr. Arnold, Jr.)

International Medical Digest
Isis (gift of Dr. Pleadwell)
Journal-Lancet
Journal of Allergy
Journal of the American Dietetic Association
Journal of the American Medical Association
Journal of the American Medical Women's Association
Journal of the American Pharmaceutical Association
Journal of Anatomy
Journal of the Arkansas Medical Society
Journal of Aviation Medicine
Journal of Biological Chemistry
Journal of Bone and Joint Surgery (gift of Dr. Craig)
Journal of Clinical Endocrinology
Journal of Clinical Investigation
Journal of the Elisha Mitchell Scientific Society
Journal of Endocrinology
Journal of Experimental Medicine
Journal of General Physiology
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Journal of the History of Medicine and Allied Sciences (gift of Dr. Halford)
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Journal of the Indiana State Medical Association
Journal of Industrial Hygiene and Toxicology
Journal of Infectious Diseases
Journal of the Iowa State Medical Society
Journal of Laboratory and Clinical Medicine
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Journal of Mental Science
Journal of the Mount Sinai Hospital
Journal of the National Cancer Institute
Journal of Neuropathology and Experimental Neurology
Journal of Neurosurgery
Journal of Pediatrics (gift of Nurses' Assoc.)
Journal of Pharmacology and Experimental Therapeutics
Journal of Physiology
Journal of the Tennessee State Medical Association
Journal of Thoracic Surgery
Journal of Tropical Medicine and Hygiene
Journal of Urology
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Kuba
Laboratory Digest
Lahey Clinic Bulletin
Lancet
Medical Annals of the District of Columbia
Medical Clinics of North America
Medical Economics
Medical Journal of Australia
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Memorias do Instituto Butantan
Mental Hygiene
Military Surgeon (gift of Dr. Pleadwell)
Minnesota Medicine
Mississippi Valley Medical Journal
Modern Hospital
Modern Medicine
Nebraska State Medical Journal
New England Journal of Medicine
New Modern Drugs
New Orleans Medical and Surgical Journal
New York State Journal of Medicine
New Zealand Medical Journal
North Carolina Medical Journal
Northwest Medicine
Occupational Medicine
Ontario Medical Review
Pennsylvania Medical Journal
Physiological Reviews
Physiotherapy Review
Plantation Health
Praxis
Proceedings of the Royal Society of Medicine
Proceedings of the Society for Experimental Biology and Medicine (gift of Clinic)
Proceedings of the Staff Meetings of the Clinic, Honolulu
Proceedings of the Staff Meetings of the Mayo Clinic
Public Health Economics
Public Health Nursing (gift of Nurses' Association)
Puerto Rico Journal of Public Health and Tropical Medicine
Quarterly Bulletin of the Northwestern University Medical School
Quarterly Bulletin of Sea View Hospital
Quarterly Review of Biology
Quarterly Review of Psychiatry and Neurology
Radiography and Clinical Photography
Radiology (gift of Dr. Smith)
Revista de Sifilografia, Leprologia y Dermatologia
Revue Belge des Sciences Medicales
Revista de Medicina Tropical Parasitologia, Bacteriologia, Clinica y Laboratorio
Rhode Island Medical Journal
Rocky Mountain Medical Journal
Science (gift of Clinic)
Scientific Monthly (gift of Dr. Hosoi)
Selected Writings by the Staff Members of the Ochsner Clinic
Southern Hospitals
Southern Medical Journal
Spokane County Medical Society Bulletin
Star
Studies from the Rockefeller Institute for Medical Research
Surgery
Surgery, Gynecology, and Obstetrics
Surgical Clinics of North America
Texas Reports on Biology and Medicine
Texas State Journal of Medicine
Trained Nurse and Hospital Review (gift of Nurses' Assoc.)
Tropical Diseases Bulletin
Turbercle
Tuberculosis Abstracts
United States Naval Medical Bulletin
U. S. Public Health Service, Journal of Venereal Disease Information
U. S. Public Health Service, Public Health Reports
Urologic and Cutaneous Review
West Virginia Medical Journal
Western Journal of Surgery, Obstetrics and Gynecology
Wisconsin Medical Journal
Yale Journal of Biology and Medicine

BOOK REVIEWS

Gynecological and Obstetrical Pathology. By Emil Novak, A.B., M.D., D.Sc., F.A.C.S. Second Edition with 542 illustrations, 15 in color. Price $7.50. Pp. 570. W. B. Saunders Company, Philadelphia and London, 1947.

The first edition of Dr. Novak's book on gynecological and obstetrical pathology was received enthusiastically when it appeared in 1940, and soon became a standard text on the subject. It is in wide use by pathologists and I would venture to say that there are few men taking the Board examinations in Obstetrics and Gynecology who fail to study it most carefully.

The appearance of a second edition is thus a noteworthy event. One hundred fifteen illustrations, including 15 in color, have been added, as well as some 148 new references to articles in the current medical literature. The illustrations on the whole are excellent, and considerably enhance the value of the book.

There are also a number of additions to the text. Mention is made of Markee's work on the vascular supply to the endometrium. There is a paragraph on Papanicolaou's vaginal smear method for the diagnosis of uterine cancer. The author points out correctly that the staining procedure requires considerable experience, and that the interpretation of the slides is reliable only in the hands of an experienced microscopist.

An excellent discussion has been added on the histologic pictures which may occur in post-menopausal endometrium, and mention is made of stromal adenomyosis in which the invading elements are entirely stromal in nature, no glands being present.

There is a brief discussion of Schiller's "mesonephroma" of the ovary; the author, in common with many others, is properly skeptical of a mesonephric origin for such tumors, assumed to be the case because of a histologic picture which suggests the formation of rudimentary glomeruli.

The effects of granulosa cell tumors and thecomas on the endometrium are discussed at greater length than in the first edition, and recent knowledge about erythroblastosis fetalis and the Rh factor is included in the chapter on diseases of the placenta by L. M. Hellman.

As in the previous edition, carcinoma of the cervix is classified in 3 groups, spinal cell, the mature type, spindle cell, the immature type, and transitional, the latter comprising the large middle group of lesions which would be graded II and III. The term "transitional cell carcinoma" is a confusing one because it has been used in so many different ways. To one person it calls to mind the transitional epithelium lining the urinary tract and suggests a carcinoma arising from this epithelium. To another it signifies a carcinoma arising from the nasopharynx where there is a "transition" from the pseudostratified columnar (nasal) type of epithelium to the stratified squamous epithelium of the pharynx. To still others it implies a carcinoma made up of cells which are intermediate between the undifferentiated basal cells and the mature cornifying cells of the epithelium, and it is in this sense that the term is used in the book. Because of this confusion many pathologists prefer the term "squamous cell carcinoma" for all three groups, and indicate the degree of maturity or immaturity by Grades of I to IV, Grade I corresponding to the mature spinal cell type, Grades II and III to the transitional cell type, and Grade IV to the spindle cell type.

An error, also present in the first edition, is on page 194. In the sentence "under the microscope, with ordinary hematoxylin and eosin stain, the hyalinized areas take a diffuse bright pink stain, standing out quite sharply from the well preserved muscle tissue of the ovary," the word "myoma" should be substituted for "ovary." The accepted name for the parasitic nematode causing "tropical elephantiasis" is Wuchereria bancrofti and not Filaria hominis sanguinis.

Obstetrical and Gynecological Pathology by Dr. Novak has long been a favorite of mine, and because of this it has been a pleasure to review the newest edition of the book. Many worthwhile additions to our knowledge have been added, and the book should be on the desk of every gynecologist, and every pathologist who is interested in the subject. It is brief, yet complete enough for all practical purposes, concise without excess verbiage, and presents both sides of all controversial matters fairly and conservatively. These qualities should endear the book to every medical student.

I. L. Tilden, M.D.

Psychology for Nurses. By Bess V. Cunningham, Ph.D. Pp. 336 with 50 line drawings and charts. Price $3.00. D. Appleton-Century, New York, 1946.

Dr. Cunningham presents this text on the basis of wide experience in teaching psychology to graduate and student nurses. Rather than follow the too frequent practice of attempting to reduce a large volume of literature to a thin book, she has written this text so that every portion is directed to the student nurse. She shows a good understanding of the motivations of this group, and uses this understanding to make the book useful to the students as persons, as well as valuable as a text. The chapter which deals with learning to study, think and reason contains many suggestions which are pertinent and helpful to any student entering a new field.

Particularly well done are the parts which deal with the adjustment mechanisms in everyday life and with reactions to strain and frustration. If these subjects alone are understood, the nurse is well on her way to becoming a student of human nature, and, as such, offering the understanding approach so essential in therapy of any patient.

This reviewer feels that the rather technical chapter on the neurologic makeup of the human organism is rather out of place in a text of this nature, especially when the author goes so far afield as to discuss the electro-encephalogram of the neurological research laboratory. The oversimplified section on the sympathetic nervous system blithely introduces an array of new vocabulary with a glibness which must indeed be bewildering to the novice. On the whole, however, this is an excellent introductory presentation of a subject most important for nurses to understand.

BRYANT M. WEDGE, M.D.

Allergy in Theory and Practice: By Robert A. Cooke, M.D., D.Sc., F.A.C.P. Pp. 572, 43 illustrations. Price $8.00. W. B. Saunders Company, Philadelphia, Penna. 1947.

Dr. Cooke, the dean of American allergists, in compiling, writing and editing this book, has produced the most complete treatise on the subject of allergy. He has drawn on his bountiful wealth of knowledge of many years of research, both academic and clinical, to bring to the profession a masterpiece of medical literature. From Section I on the "Fundamental Aspects of Allergy" to the final section on "Technics," the author in his clear cut pedagogical style traces the entire subject in a methodical manner, simple, concise, and devoid of the flare of the unusual or exotic. The book is replete with case histories to bring to the reader and student a fund of knowledge illustrative of the many perplexing problems of the allergist. Much of the book is devoted to the fundamental theories and their practical application used by the allergist in solving individual enigmas which present themselves in his everyday practice. References are exceedingly well chosen and cover the entire subject matter.

This volume should grace the library of all physicians interested in the subject of allergy. It is the classic on the subject.

TELL NELSON, M.D.

Radiology for Medical Students. By Fred Jenner Hodges, M.D.; Isadore Lampe, M.D.; and John Floyd Holt, M.D. Pp. 424, 103 illustrations. Price $6.75. Year Book Publishers, Inc., 304 S. Dearborn Street, Chicago 4, Illinois. 1947.

As stated in the preface, the authors have fulfilled their aim in presenting a book in which "nothing shall be included that is unnecessary to the clear and usable understanding of radiology which every physician should possess."

The book is divided into two separate sections; diagnostic roentgenology and radiation therapy, each of which has been so clearly and well presented that the reader acquires a thorough understanding of the subject matter. A short introductory chapter is included concerning radiation physics and there is also an introductory chapter to the two sections containing important background material permitting of greater brevity and less repetition of subject matter than would otherwise be possible.

In diagnostic roentgenology the subject matter is divided into anatomic subdivisions. Starting with the head, paranasal sinuses, mastoids, cranium and facial bones, the normal anatomy and variations in normal anatomy are shown and described. The standard techniques of taking roentgenograms are outlined with the hope that the reader clearly understands normal anatomic structures.

Diseases of each system are discussed explaining the reason for such changes as are seen on the roentgenogram. The rare conditions and special diagnostic procedures are only briefly mentioned, but the basic principles of roentgenology are given in such a way as to make it possible for the physician to go about making a diagnosis on an orderly and logical basis.

Each system, such as the stomach and small intestine, the urogenital tract, etc., is similarly treated giving a logical basis for every step in making a diagnosis. Much stress has been placed on the normal before specific conditions are discussed.

In the section on therapeutic roentgenology the

material has been presented in a similar fashion with an introductory chapter to explain the principles behind radiation and its biological effects on tissues. A few of the most important principles of radiation have been incorporated into this chapter. This section is concerned mostly with the treatment of neoplastic disease. The pathological, clinical and radiological principles are given equal weight. A separate chapter enumerates some of the other conditions, other than malignancies, for which radiation and radium therapy are used.

This book, I think, is one of the best for medical students and practicing physicians to obtain a fundamental knowledge of the specialty of radiology.

GORDON P. VAN NUYS, M.D.

Textbook of Obstetrics (*Williams Obstetrics*), 9th edition. By Henricus J. Stander, M.D., F.A.C.S. Pp. 1277 with 740 illustrations. Price $10.00. D. Appleton-Century Company, New York, 1945.

This 1945 edition brings up to date the textbook that most of us used as our standard during our medical school years and have always referred to since that time. The present volume should occupy the same high place as its predecessors.

All the departments have been revised and the new material judged well. Controversial issues are fairly stated and the judgment of the author has soundly evaluated the newer findings, drugs, and therapeutic measures. There seems to be very little of value up to publication date that has not been mentioned and evaluated.

The new Stander should be in the library of every practitioner doing occasional obstetrics, and will surely be among the volumes of every obstetrician.

ROBERT G. HUNTER, M.D.

Case Studies in the Psychopathology of Crime. By Ben Karpman, M.D. Volume II. Price $16.00. Pp. 738. Medical Science Press, 347 West 87th St., New York 24, N. Y., 1947.

This book contains psychiatric studies of four criminals. It is not, like so many such reports, merely a psychiatric cross-section of the criminals taken at or about the time they committed the crimes for which they were convicted; it is a lengthwise, a *longitudinal* study, delving into remote first causes of their social maladjustment and their criminal career. Their crimes are more than merely excused: they are explained, in understandable terms, and the ultimate responsibility for them is fixed where it belongs—wherever that may be.

No one whose work might be helped by a clearer understanding of the behavior pattern of criminals can afford to overlook this valuable contribution to the literature of sociology, psychiatry, and criminology.

H. L. ARNOLD, JR., M.D.

Radio: How, When, and Why to Use It. By Beatrice K. Tolleris, Chief Consultant, National Publicity Council. Price, $1.00. Pp. 48. National Publicity Council, 130 East 22nd St., New York, N. Y. 1946.

We have previously reviewed one of the many useful publications of the National Publicity Council, entitled How to Make a Speech and Enjoy It. This is just as useful and practical a guide as that one, and considerably more detailed. It should be in the library of everyone interested in education and information of the public, for it will certainly enable him to do a far better job of it for far less money. As important as the how, why and when to use radio may be, the how *not* and the when and why *not* are equally important and are given with equal clarity and numerous examples. Incidentally, the classified service memberships offered by the Council in an enclosed pamphlet make very attractive reading too. Public Relations Committees of County and Territorial (or State) medical organizations would do well to look these over carefully. They appear to be a good investment.

H. L. ARNOLD, JR., M.D.

The National Formulary prepared by the Committee on National Formulary under the supervision of the Council by authority of the American Pharmaceutical Association. Eighth Edition. Pp. 850. American Pharmaceutical Association, Washington, D. C., 1946.

Your reviewer must first admit that he has never before looked the National Formulary over in anything like a complete way or with any other purpose in mind than to find some preparation which was not listed in the *United States Pharmacopeia*. Having now, however, looked the book over at some length and having discussed it with a number of physicians, pharmacists and manufacturing chemists, he is prepared to say that he can see no reason for the continued existence of this publication. If the new edition of the *United States Pharmacopeia* which is about due will pick up eight or ten preparations of importance now in the *National Formulary* and not in the *Pharmacopeia* and add them to their list, this book can be discontinued forever without anyone suffering very much.

Many of the changes this edition makes in the seventh edition are almost humorous. Why, for example, at this time does the *National Formulary* decide that brandy, whisky and sherry should be included in it, whereas they had never been men-

tioned before? Why, at this time, when chaulmoogra oil and its esters have been quite definitely determined to be of no pharmacological importance whatever, do they see fit to add them? Tincture of nux vomica has now been added; presumably it has been under trial for the past one hundred and fifty years and finally is now accepted. The same remark applies to santonin, which is now included, and, oddly enough, to honey. Antimeningococcic and antipneumococcic sera are now included, precisely at the time when they have lost much of the justification for their existence. Two injectable mercurial compounds are added, for the first time, though such preparations have been virtually replaced by bismuth preparations (which are *not* mentioned!) for the past fifteen years.

Two preparations of digitalis are listed,—the solid extract and the infusion—neither of which has been used in medicine for the last seventy-five years and never will be used again. When you come to an important [*sic*] drug like valerian, however, it appears in four different forms! Likewise, Echinacea, cudbear, uva ursi and innumerable similar drugs, none of which have been used in medicine for many, many years. When you come to the biologicals, we still find dried ovarian extract, corpus luteum extract and dried pituitary and anterior pituitary extract, presumably for mouth administration, all of which are definitely known to be inert in such form. Sulfapyridine—the least useful of the sulfonamides—is the only one included!

The two sections on the preparation of test solutions and laboratory reagents are obviously unnecessary, since standard textbooks on laboratory procedures give these formulas in greater detail.

Apparently this book should have gone out of existence at about the time when the colored urns of water disappeared from the drugstore windows.

H. L. Arnold, Sr., M. D.

A Handbook of Commonly Used Drugs. By Michel Pijoan, M.D., and Clark Harvey Yeager, M.D., Dr. P. H. Price $3.75. Pp. 206. Charles C. Thomas, Springfield, Illinois. 1947.

This book appears to be a potentially useful one for a busy practitioner who desires a compendium of pharmacology, but is nothing more than that. It also presents several unusual and rather remarkable omissions from its table of contents, considering that it was printed in 1947. For example, demerol and seconal are not mentioned. Coramine is deprecated as a respiratory stimulant; certainly it is the impression in this community that the fact is contrary to this statement. No mention is made of the use of benzedrine for causing anorexia in a reducing regimen. The use of curare in reinforcing anesthesia, and in treatment of poliomyelitis, is not mentioned. In the section on the sulfonamides there is no discussion whatever of the various means for combating and preventing renal blockage from crystalluria.

Syphilologists, in general, regard mapharsen as the arsenical of choice in the treatment of syphilis; the book accords this honor to arsphenamine. The statement is also made that "sixteen months after the lesion has healed and the serology is negative" is the time to discontinue the use of arsenicals. This would be a long course of treatment in many cases—in some instances, lifelong. In the same paragraph is the statement that arsenicals should be given "alternating with heavy metals" —this is, to say the least, ambiguous as to what is meant by "ålternating." The whole section on the therapy of syphilis needs revision badly, both as to content and as to proofreading. One of the headings, for example, mentions the use of iodides but nothing in the text following the heading mentions the word iodides. This is, perhaps, just as well.

It is remarkable, too, that no mention is made of the various types of penicillin, and that under the discussion of streptomycin no mention is made of the almost universally reported eighth nerve damage frequently resulting from long continued use of this drug.

The section on the treatment of tropical diseases is distinctly superior to the balance of the book and the summary in table form of the anthelmintics is excellent. No mention, however is made of the use of promin in leprosy. There are some almost medieval touches in the glossary of technical terms in pharmacology, as, for example, acronarcotic, which is defined as being a drug which is narcotic and acrid. The usefulness of such a word is certainly open to question. It is stated, also, that a discutient is a drug which promotes the disappearance of an exudation. A good deal of this sounds very much like Galen.

On the whole, however, the book is well up to date and embodies the usual pharmacological information to be found in a textbook on the subject, but does it in a very small space.

H. L. Arnold, Sr., M.D.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

After filling us full of Mrs. Roy's excellent steaks, President Walter Seymour called the 259th meeting to order at 8:00 p.m., March 8, 1947, at Kona Tavern.

Before the undersigned knew it, he was appointed acting secretary and the meeting progressed so rapidly that the names of those present were not listed. At this time I can only attempt to recall as best I can those that were present: Dr. Seymour, Dr. Hayashi, Dr. Orenstein, Dr. Henry Yuen, Dr. Carter, Dr. Okada, Dr. Fernandez, Dr. Tomoguchi, Dr. Crawford, Dr. West, Dr. Oto, and Dr. Phillips.

A letter from Dr. Schultz of Honolulu was read offering to come to this Island to speak to the members of our society.

Dr. Crawford, chairman of the Library Committee, requested the annual appropriation of the committee be increased to $400.00 for this year, an increase of $90.00 over last year. He also urged that our library be organized so that it will meet the standards and probably gain the acceptance of the National Medical Library Association. He concluded with an explanation of the expenditures of the committee. Dr. Oto read the financial report, which was unanimously accepted. Dr. Phillips, chairman of the Scientific Works Committee, read his report and expressed the hope that the policy of having Honolulu men come here to speak be continued.

Subsequent to the reading of the treasurer's report and no doubt moved by Dr. Crawford's stirring appeal for another $90.00 per annum, Dr. Orenstein moved that the annual dues be raised to $40.00. This motion was seconded by Dr. Phillips. Dr. Seymour then stated that according to the constitution the above motion must lie on the table for one month to be voted on by the entire society.

Following the report of the Library Committee, Dr. Orenstein, seconded by Dr. Yuen, moved that the Library Committee be granted $400.00 for the coming year. This motion carried unanimously.

A letter from Dr. William Leslie submitting his resignation from this medical society was read. Dr. Leslie also gave his reasons for submitting his resignation. Dr. Orenstein, seconded by Dr. Bergin, moved that the resignation be laid on the table and that Dr. Leslie be so notified; also, all members were urged to see Dr. Leslie as soon as possible and urge him to reconsider. The motion carried unanimously.

Dr. Seymour had appointed Drs. Crawford, Orenstein and Phillips to act as the Nominating Committee. Their report was unanimously approved by the Society, and the following mer elected:

President—Dr. S. Mizuire.
Vice-President—Dr. L. Fernandez.
Secretary—Dr. H. M. Sexton.
Treasurer—Dr. G. Tomoguchi.
Delegates—Drs. W. Seymour and W. Bergin.
Alternate Delegates—Drs. R. West and L. Fernandez.
Censor—Dr. Oto.

W. N. Bergin, M.D.
Acting Secretary

* * *

A special meeting of the Hawaii County Medical Society was called to order by Pres. Mizuire at 7:30 p.m. April 4, 1947, and turned over to Dr. Pinkerton and Mr. Stegen for messages regarding the Medical Economic Program. Members present were Drs. C. B. Brown, M. L. Chang, Philip Chock, Wah Tim Chock, Crawford, Hata, Ireland, Kasamoto, Loo, Mizuire, Patterson, L. L. Sexton, Yoshina, Yuen, West, Wippermann, Woo, and Tomoguchi. Dentists present were Drs. Goo, August Kubo, and Ogawa. Mr. Carroll of the HMSA was also present.

Reporting on the activity of the Medical Economic and Legislative Committees Dr. Pinkerton outlined a number of bills introduced in the legislature concerning medicine and dentistry. For example, H. S. 364 (companion S. B. 135) making graduates of Class C medical schools eligible for examination, was first passed by a 27-3 vote. But after a rehearing of the committee the vote was changed to 17-12. This final vote would cause the Senate to scrutinize the bill more carefully than it would have at first. He pointed out that thus far 938 bills have been introduced, making it impossible for any one man or committee to digest all the bills.

Mr. Stegen, Assistant Director of the National Physicians Committee, who is here to help us, then gave an inspiring talk.

This was followed by questions and answers. Dr. Patterson asked for recommendations regarding our future course. It was pointed out that the long-range program mentioned by Dr. Pinkerton would cover this. Dr. L. L. Sexton asked regard-

ing the value of Walch's booklet. It was pointed out that it is a worthwhile one; it is the result of the New York State Medical Society's commissioning him to prepare it. This is one of the main references on the national debate subject, "Socialized Medicine." In connection with socialized medicine, Mr. Carroll urged that school teachers be informed, as they do not seem cognizant of it.

In conclusion Mr. Stegen said that the HMSA plan is the most comprehensive plan in the United States, and we, therefore, have a good argument against the bill before the legislature.

In concluding, Dr. Pinkerton warned that the long-range public relations program will cost money—to be raised most probably by assessment. In Honolulu, it was proposed that special prorated assessment be levied on men in institutional jobs with fixed income. However, consensus is that first consideration should be "Is he a doctor?" If so, he accepts the privileges of one. Therefore, he should carry his load.

After thanking the two men, Dr. Mizuire read a letter from the HMSA informing us that they had received a wire from the Veterans Administration stating that, effective immediately, medical authorization will be limited to medical emergencies only, this being due to budget difficulties and reduced appropriations.

G. Tomoguchi, M.D.
Acting Secretary

* * *

The 260th regular meeting was held on April 10, 1947 in the staff room of the Hilo Memorial Hospital. Those present were: Drs. W. Bergin, M. H. Chang, M. L. Chang, Philip Chock, Wah Tim Chock, L. Fernandez, H. D. Ireland, S. Kasamoto, Walter Loo, S. Mizuire, A. Orenstein, T. Oto, H. M. Patterson, C. L. Phillips, Harold M. Sexton, E. F. Slaten, George Tomoguchi, R. T. West, R. P. Wippermann, Timothy Woo, T. Yoshina, Strathairn, and Gerundo.

It was agreed that the resignations of Drs. Roll and Larsen be effective as of February 28, 1947.

Much discussion followed on the matter of Dr. Leslie's resignation. It was agreed that the resignation of Dr. Leslie be tabled until after the annual meeting of the Territorial Medical Association on Kauai.

Because there was no quorum present and the notice sent out did not state a definite amendment to the Constitution, the increase in dues was postponed until the next meeting.

Dr. Yamanoha was accepted into regular membership.

Dr. Gerundo discussed the problem of increasing pathological and bacteriological studies in the hospital. He requested that doctors try to obtain funds for this work. The surgical-pathological lectures were also discussed.

Application for membership by Dr. Strathairn was turned over to the Board of Censors.

There was much discussion on various problems which may come up at the Kauai meeting to give the delegates an idea as to the wishes of the Society. It was recommended that the delegates try to impress the Territorial Medical Association that assessments be voted upon by the various County Medical Societies before being levied. The Society was divided on the problem of assessments; whether all members should pay the assessment as levied or that there should be a compromise in certain instances. It was felt that there would be considerable objection to further assessments until we were given a financial report as to the past and future expenditures.

Dr. W. Loo stated that Dr. T. Yoshina had given the library thirty volumes of pediatric journals. The Secretary was instructed to write a letter of thanks to Dr. Yoshina.

Dr. Patterson suggested that, since Dr. Orenstein would be in Atlantic City at the time of the A.M.A. meeting, the delegates to the Kauai meeting vote in favor of his appointment as an alternate delegate.

H. M. Sexton, M.D.
Secretary

* * *

HONOLULU COUNTY MEDICAL SOCIETY

One hundred members and guests attended the regular monthly meeting on March 7 at the Mabel Smyth Building Auditorium, at which five new members were welcomed: Drs. Richard You, Theodore T. Tomita, Joseph T. Lucas, Frank S. Lee, and Frank H. Hatlelid.

It was agreed to set the dues for 1947-1948 at sixty dollars, as recommended by the Board of Governors.

It was announced that the Board of Governors had approved the Board of Health's suggestion that mass treatment of pediculosis in school children, using DDT powder, be carried out by the latter organization. No opposition was voiced.

A panel discussion of our campaign against socialized medicine was conducted by five speakers: Dr. F. J. Pinkerton, Dr. Lyle Phillips, Dr. Joseph Palma, Mr. Homer Troy(who discussed the Fair Employment Practice Act), and Mr. Urban Wild (who discussed the philosophic implications and the financial problems inherent in collectivism generally and socialized medicine in particular).

All physicians were urged to copy on their letterhead, and distribute to as many patients as possible, a personal letter asking the patients to write their legislators in protest against the passage of any bill admitting governmental interference with the practice of medicine.

A movie entitled "Penicillin, Its Use in Medicine and Surgery" was shown through the courtesy of Squibb & Co.

* * *

About seventy-five members attended the annual meeting of the Honolulu County Medical Society on April 4, 1947, in the auditorium of the Mabel L. Smyth Memorial Building. Following a movie entitled "Intocostrin: Its Use in the Treatment of Acute Poliomyelitis," presented through the courtesy of Squibb & Co., the meeting was given over to the business affairs of the Society and of the Honolulu County Medical Library.

Dr. F. J. Pinkerton gave a detailed narrative report of the activities of the Medical Economics Committee of the Territorial Medical Association. He was followed by Mr. Edward Stegen, Associate Director of the National Physicians' Committee in Chicago, who had again been sent to Honolulu at the expense of that organization to assist us in our fight to protect ourselves and the community from the current attempt to introduce socialized medicine here under the guise of "organized prepayment for hospital services." Mr. Stegen explained the organization and financing, and the purpose, of the National Physicians' Committee, and discussed our problem in Hawaii in detail. He answered numerous specific questions regarding all these matters.* He strongly emphasized that, no matter what the outcome of the present battle, medical men must continue to support and guide and conduct *a continuing program of public education* in regard to medical matters, *a continuing program of public relations* (on behalf of the medical society, which needs it, rather than of the individual physician, who doesn't), and *a continuing program of selling of voluntary health insurance* as offered by the Hawaii Medical Service Association. These things would be necessary, he said, because the proponents of government intervention and collectivism would probably continue to press their views upon every newly elected legislature for many years to come. A unanimous vote of appreciation and confidence was extended to Dr. Pinkerton and his fellow committee members for the work they had done and were doing.

* A detailed record of Dr. Pinkerton's and Mr. Stegen's remarks is available in the Minutes of the Society.

The reports of the following officers and committees were then presented, and accepted and placed on file:

Corresponding Secretary: Dr. H. L. Arnold, Jr.
Treasurer: Dr. J. W. Devereux
Committee on Forms of Medical Practice: Dr. L. A. R. Gaspar
H.M.S.A. Board: Dr. Joseph Palma
Public Relations Committee: Dr. H. Izumi
Workmen's Compensation Committee: Dr. C. E. Fronk
Program Committee: Dr. A. S. Hartwell
Postgraduate Committee: Dr. Joseph Palma
Library Committee: Dr. H. H. Walker
Library Board: Dr. F. J. Halford
President: Dr. H. E. Bowles

These reports are filed in the offices of the Society and may be read there by any member in good standing.

Dr. Joseph Lam, chairman of the Nominating Committee, presented a mimeographed slate of nominations which was unanimously adopted by the members present. The following were elected to office:

President: Rogers Lee Hill
Vice-President: H. C. Gotshalk
Corresponding Secretary: Harry L. Arnold, Jr.
Recording Secretary: S. L. Yee
Treasurer: John W. Devereux
Board of Governors: H. M. Chandler, Harold Johnson, J. T. Kuninobu
Alternate Board of Governors: Ralph B. Cloward, Thomas F. Fujiwara, F. D. Nance
Board of Censors: H. L. Arnold, Sr.
Delegates to Hawaii Territorial Medical Association: Homer Izumi, Robert Johnston, Richard K. Chun, Garton Wall
Alternate Delegates: Morton E. Berk, Alvin V. Majoska, Robert D. Millard, William M. Walsh, Laurence M. Wiig, Y. C. Yang
Committee on Forms of Medical Practice: H. E. Bowles (5 years), Douglas Bell (2 years—replacing Dr. Benyas, deceased)
H.M.S.A. Board: Steele Stewart, Thomas H. Richert, Paul Withington, Joseph Palma (1 year—replacing Dr. Shanahan, resigned)

Dr. Lam also presented nominations for election to the Board of Governors of the Honolulu County Medical Library, and the following were unanimously elected:

President: F. J. Halford
First Vice-President: Paul Withington
Second Vice-President: Wah Kai Chang
Library Board: Harold M. Johnson

The new president, Dr. Rogers Lee Hill, assumed the chair, and adjourned the meeting. At the close of the meeting, refreshments were served on the lanai.

S. L. Yee, M.D.
Recording Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was called to order by Dr. B. O. Wade at the Wilcox Memorial Hospital on February 6, 1947. Members present were Drs. Wade, Brennecke, Toney, Liu, Boyden, Kuhns, Wallis, Fujii, Depp, Cockett, and myself.

Dr. Coe of Seattle, Washington, and Mr. Ketchum were guest speakers. Dr. Hewell from the Division of Crippled Children accompanied Dr. Coe. Mr. Achor, Mr. Ifversen, Dr. Young, and Mr. Burns were also present.

A letter from Mr. Fern pertaining to establishment of reserve of professional blood donors was read. It was agreed that the Kauai County Medical Society approve the undertaking of this program by the Rotary Club of Kauai.

Mr. Ifversen of the Hawaii Medical Service Association introduced Mr. Jay Ketchum, Executive Director of the Michigan Medical Service Plan. Mr. Ketchum, who assisted the Territorial Medical Economics Committee with their newly created program, gave a material background for opposition to the compulsory health insurance as proposed by the Hospital Survey Study Commission. He emphasized that such legislation should be stopped right now before it gets a foothold here in Hawaii.

Dr. Coe who is also experienced in medical economics added that:

1. Political domination of medical care plan always resulted in service deterioration.
2. Tax supported plan good on the surface, but poor in quality.
3. From experience in other countries, inferior medical services result from compulsory tax plan.
4. Voluntary prepayment medical plan such as now existing in Hawaii will accomplish all the objects of this resolution, and people will receive highest type of medical care.

Dr. Coe, a plastic surgeon who came to Hawaii as a guest of the Division of Crippled Children, spoke on several phases of plastic surgery, but particularly on treatment of scars, various types of skin grafts and operative procedures for syndactylism.

The regular meeting of the Kauai County Medical Society was held at the Wilcox Memorial Hospital on March 12, 1947.

Members present were Drs. Chisholm, Boyden, Depp, Cockett, Wallis, Fujii, Toney, Liu, Wade, Kuhns and Masunaga. Guests present were Drs. Young and Horton.

Dr. Wallis reviewed the progress made to procure a pathologist for Kauai; no one had accepted the position as offered. Since the strike on the sugar plantations, the economic situation has changed, and the money to maintain a pathologist is probably not available from the planters. It was decided to drop this matter for the time being.

Dr. Chisholm informed the members that our new Health Officer's status is not too strong, because the federal fund to pay his salary is not available after July 1. It was suggested that this Society should go on record approving a full-time Health Officer for Kauai.

The KMSA's new proposed pineapple plan was discussed, but nothing could be settled at this meeting.

EICHI MASUNAGA, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

A special meeting of the Maui County Medical Society was held on April 14, 1947. Members present were: Drs. Dunn, Dusendschson, Cole, St. Sure, Rothrock, Kanda, Tompkins, E. Kushi, H. Kushi, Patterson, K. Izumi, Anderson, Fleming, Shimokawa, Tofukuji, and Sanders.

Dr. Patterson was elected delegate to Kauai meeting in May, and Dr. Anderson as alternate.

Nominating committee presented the following slate:

President—Dr. Anderson.
Vice president—Dr. St. Sure, Jr.
Secretary-treasurer—Dr. Kanda.

These men were elected unanimously for the coming year.

The Society sent flowers, and is attending en masse the services for Dr. W. D. Balfour, who passed away April 13, 1947. The loss of our president-elect was deeply felt.

JOHN SANDERS, M.D.
Secretary

NOTES AND NEWS

PERSONALS

Dr. Henry C. Gotshalk, of Honolulu, is attending the meeting of the American College of Physicians in Chicago, where he represents the Hawaii Chapter at the meeting of the Board of Governors, in lieu of Dr. Harry Arnold, Sr., who was unable to attend. Following this Dr. Gotshalk will take Part Two of the examinations of the American Board of Internal Medicine in Philadelphia.

Dr. Maurice Gordon, of Honolulu, has returned after several months in Virginia and other mainland points.

Dr. Marquis Stevens, of the Fronk-Wynn Clinic, returns in July after visiting medical centers in New Orleans, Boston and Chicago. Other Honolulu physicians presently on the mainland include Drs. William French, Henry S. Dickson and Fred Giles. A number of them will attend the AMA meeting in Atlantic City.

Dr. Phillip S. Arthur, of Honolulu, is on the mainland taking the examinations of the American Board of Radiology and also attending the meeting of the American College of Radiology.

Dr. Fred Warshauer, of Kahuku, has left the Islands to take a residency in pathology in Denver.

Dr. Robert Horton, a graduate of Western Reserve University, has assumed the position of health officer on the island of Kauai. Dr. Horton received his training in public health work at Harvard University, where he received the degree of M.S. in Public Health.

Recent additions to the interne staff at the St. Francis Hospital, Honolulu, include Drs. Teru Togasaki, a graduate of the University of California Medical School; Jen Fong Moo, a graduate of St. Johns University Medical School, Shanghai; and Carol Wong, a graduate of St. Tomas Medical School, Manila. Dr. William Allely completed six months' residency and has returned to his home in Nebraska to begin practice.

At the Leahi Hospital, Dr. Stephen Tyau, a graduate of St. John's University in Shanghai, is now on the medical staff. Dr. Tyau had five years of residency at the Seaview Hospital, Staten Island, New York, where he specialized in tuberculosis work. Dr. Lansing Liu, dean of the Nanchang National Medical School in China, is studying tuberculosis for one year under Dr. Hastings Walker and staff, prior to returning to China. Dr. William Ito, of Honolulu, will continue on the staff of Leahi in a part-time capacity, following the opening of his offices for the practice of medicine and surgery in Kaimuki. Dr. Robert Perlstein is vacationing at his home in Florida and will return in August after visiting tuberculosis centers and attending several medical meetings on the mainland. Dr. David Radner, formerly on the staff of the Leahi Hospital, is now practicing in Chicago, where he is specializing in diseases of the chest. Dr. George Williamson, previously on the staff of Puumaile Hospital, Hilo, is now on the staff of Leahi.

Dr. K. S. Tom has opened his offices, specializing in obstetrics and gynecology, at 296 Vineyard St., Honolulu. Dr. Tom is a graduate of Loyola University Medical School in Chicago and received his graduate training in his specialty at various Chicago hospitals, including Cooke County and the University of Illinois Research Hospital. He served for two years in the Army Medical Corps in the European Theatre.

The Queen's Hospital has recently added the following to the interne staff: Dr. Frank E. Darrow, of the University of Iowa; Dr. Dorothea E. Neubauer, of the University of Texas; Dr. Clara J. Cavanaugh, of the University of Iowa; Dr. Ernest A. Bickell, of Hahnemann Medical School, Philadelphia; and Dr. William M. Allen, of Northwestern University. Dr. Gordon P. Van Nuys, a graduate of the University of California, is the first Assistant Resident in x-ray. Internes who have recently completed their services include Drs. Bunderson, Ewing, Brainerd, Thorrup, Perry and Martt, who have left for military service in either the Army or Navy.

Dr. James R. Judd, of Honolulu, is taking an extended vacation, his first in many years, in California.

Dr. L. Clagett Beck, of The Clinic, has returned from a five weeks' trip to the mainland where he attended courses at the University of Michigan and at Northwestern University, both of which were conducted by the American College of Physicians, and following this, attended the annual meeting of the American College of Physicians in Chicago.

In May, Dr. Alfred S. Hartwell of The Clinic left with his family for the mainland, where Dr. Hartwell will attend the 100th anniversary meeting of the American Medical Association in Atlantic City as Hawaii's alternate delegate as well as postgraduate sessions and clinics in New York and Boston.

Dr. Ralph Steffe will leave the Department of Obstetrics and Gynecology of The Clinic about July 1, 1947, to return to Michigan.

Dr. Rodney West will return to The Clinic on the staff of the Department of Obstetrics and Gynecology of The Clinic about July 1, 1947.

Dr. Eric A. Fennel left for the mainland on May 11, 1947, for a three months' vacation tour.

Dr. and Mrs. George F. Straub left Honolulu early in May for the mainland. They plan to make their home in New York City and their address is: The Buckingham, 101 West 57th Street, New York, N. Y. Dr. Straub does not contemplate the further practice of medicine.

Dr. and Mrs. Kyril B. Conger leave for Philadelphia in June for an indefinite period. Dr. Conger, who has been associated with the Medical Group for the past year, has been made Professor of Urology at Temple University Medical School.

Dr. Alfred L. Arnold, Sr., father of Dr. Harry L. Arnold, Sr., and grandfather of Dr. Harry L. Arnold, Jr., both of Honolulu, died at his home in Owosso, Michigan, on April 19 at the age of 89. Dr. Arnold was a frequent visitor to Honolulu, his last visit here being last winter.

Dr. Paul Withington, kamaaina Honolulu physician, has been appointed chairman of the Territorial Boxing Commission by Governor Stainback.

Dr. Raymond H. Hiroshige, a native of Wai alua, Oahu, has opened his offices at 297 So. Vine yard St., Honolulu, after spending five years in surgical training and assistantship in Illinois. Dr. Hiroshige is a graduate of Creighton University Medical School, Omaha, in 1941 and interned at Council Bluffs, Iowa.

Dr. Morton E. Berk, of the Medical Group, has been appointed medical consultant to the vocational rehabilitation service of the Department of Public Instruction.

Dr. Robert S. Young, of Ft. Scott, Kansas, has arrived in Honolulu to take up a residency under Dr. Nelson Hatt at the Shriner's Hospital. Dr. Young served in the Army in the southwest Pacific and was discharged as a Major a year ago. He is a graduate of Northwestern University Medical School and interned at Henry Ford Hospital, Detroit.

Dr. Marie K. Faus was recently appointed by Governor Stainback to serve as a member of the Board of Hospitals and Settlement.

Dr. Fred K. Lam was reappointed to the Board of Regents of the University of Hawaii.

* * *

HONOLULU SURGICAL ASSOCIATION

This society has recently been reorganized under the leadership of Dr. Joseph E. Strode, it having been disbanded during the war years. A meeting was held at the Shriners' Hospital in April at which orthopedic cases were presented by Dr. Nelson Hatt and a round table discussion on thyroid disorders was held under the chairmanship of Dr. Rogers Hill.

It is planned to hold meetings every two months, or oftener if the members wish. Dr. Grover Batten, chairman of the program committee, has announced that he would like to have titles of papers sent in to him and round table subjects offered. It is desired to create considerable interest in the meetings by active discussions of subjects of surgical concern.

In order to carry out its programs, which will include mainland speakers and operators in the future, it is necessary to assess each member annual dues of $10.00. Checks should be made payable to the treasurer, Dr. Laurence Wiig, and either sent to him or to Mrs. Bennett, at the Mabel Smyth Building. There will be no charge for any members from any of the military services or USPHS, nor from any physician serving as a resident or interne in a hospital. Any other physician may become a member of the society by paying the annual dues. There are no restrictions on membership as to specialization in surgery, one of the objects of the Association being to foster and encourage knowledge of surgery amongst all who are interested in it, whether or not they do surgery themselves.

OBITUARY

Dr. Bertie Mobbs, kamaaina physician and surgeon, expired April 15th, at his home, 1004 13th Avenue, Kaimuki, after an extended illness. Dr. Mobbs was born in England in 1876 and came to the United States at the age of five. He came to the Islands in 1918 and practiced on Maui and later in Honolulu. He is survived by the widow, two daughters and two sons.

CALLING ATTENTION TO

Items of possible interest to friends of Chauncey D. Leake

March, 1947

1. SYMPOSIA: Abstracts are available of excellent antibiotic symposium held 2/1/47 under auspices National Institute of Health; the reports deserve publication in full. R. H. Goetz, M. M. Suzman and L. McGregor offer interesting symposium on hypertension (*South African Med. J.* 21: 2, Jan. 11, '47). Symposium on Army pathology appears in tribute to J. E. Ash (*Mil. Surg.* 99: 361, '46). G. M. Badger and E. Stedman discuss molecular asymmetry and biological action (*Nature* 159: 194, Feb. 8, '47). Important physiological surveys covering all recent work from growth to defense mechanisms coming soon (*Ann. Rev. Physiol.* Vol. 9, 725 pp., '47). Recent symposia of N. Y. Academy of Science include Lymph (*Proc.* 46: 679, '47); Blood Groups (46: 883, '46); Brain and Body Weight in Man (46: 993, '47); Proteins and Protein Hydrolysates in Nutrition (47: 241, '46); Physico-Chemical Mechanism of Nerve Activity (47: 375, '46); Antibiotics (48: 31, '46) and Folic Acid (48: 255, '46). Note discussion on overactivity of adrenal cortex (*Proc. Roy. Soc. Med.* 40: 35, '46) and ditto on birth control (*Ibid* p. 51).

' ' '

2. PHYSIOLOGY: W. L. Lipschitz and E. Stokey discuss various mechanisms of antidiuresis (*Am. J. Physiol.* 148: 259, '47). T. Sollmann notes 15 day survival in cold of neuromuscular reflexes after somatic death (*Ibid* p. 299). J. Auer and H. Krueger describe peristaltic and antiperistaltic phenomena in gut (*Ibid* p. 350). W. Raab and R. J. Humphreys find that sympathetic ganglia contain much epinephrin and related cmpds (*Ibid* p. 460). R. Gesell & Co. further discuss electrotonic theory of nervous integration (*Ibid* p. 515). D. H. Smyth finds much acetate metabolism in liver related to fat metabolism, about 3 m mol/kg/hr, slightly less than alcohol (*J. Physiol.* 105: 299, '47). P. Hugh-Jones discusses effect of limb position of muscle force (*Ibid* p. 332). J. H. Gaddum & L. G. Goodwin suggest that liver sympathin is norepinephrin or tyramine (*Ibid* p. 357). E. Mellanby claims that vitamin A regulates position and activity of osteoblasts and osteoclasts (*Ibid* 382). Note also S. B. Wolbach's neat article on Vitamin A and skeletal growth (*J. Bone Joint Surg.* 29: 171, '47). D. Nachmansohn & Co. discuss general role of acetylcholine in nerve and muscle conduction (*J. Neurophysiol.* 10: 11, '47). C. R. Giudice reports on potassium in cephalic fluids (*Rev. Neurol. Argentina* 11: 105, '46). E. E. Ecker & Co. find low serum protein disposes toward low complement titer in infectious diseases (*J. Clin. Invest.* 25: 800, '46). M. Prinzmetal & Co. find toxic factor in blood in burn shock (*Ibid* p. 781). M. Bjorneboe & Co. (Copenhagen) report on role of plasma cells as antibody producers (*J. Immunol.* 55: 121, '47). F. Schlenk and M. J. Waldvogel note enzymes reducing pentose concentration from purine and ribose nucleotides and sides (*Arch. Biochem.* 12: 181, '47). R. W. Gerard & Co. find choline esterase not essential to nerve conduction (*Proc. Soc. Exper. Biol. Med.* 64: 106, '47).

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This Professional Men's Preferred Lifetime Non-cancellable Policy pays for every injury or accident, even Commercial Air Line travel is fully covered. It covers all sickness and every disease except insanity and venereal diseases. The maximum benefits are $600.00 monthly and its minimum benefits are $200.00 monthly for any illness. Accident benefits pay double indemnity for travel accidents on a common carrier, excepting air travel, which pays only the regular indemnity benefits.

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(2) The Company's right to terminate the policy at a certain age (Standard Provision No. 20).
(3) The Company's right to refuse renewal of policy to any individual practicing member of your group is forfeited except for non-payment of premium on or before due date.
(4) The Company's power to impose a Rider, eliminating the benefit for something that may happen or develop to render you an undesirable or uninsurable risk, is cancelled through the elimination of each of the above.

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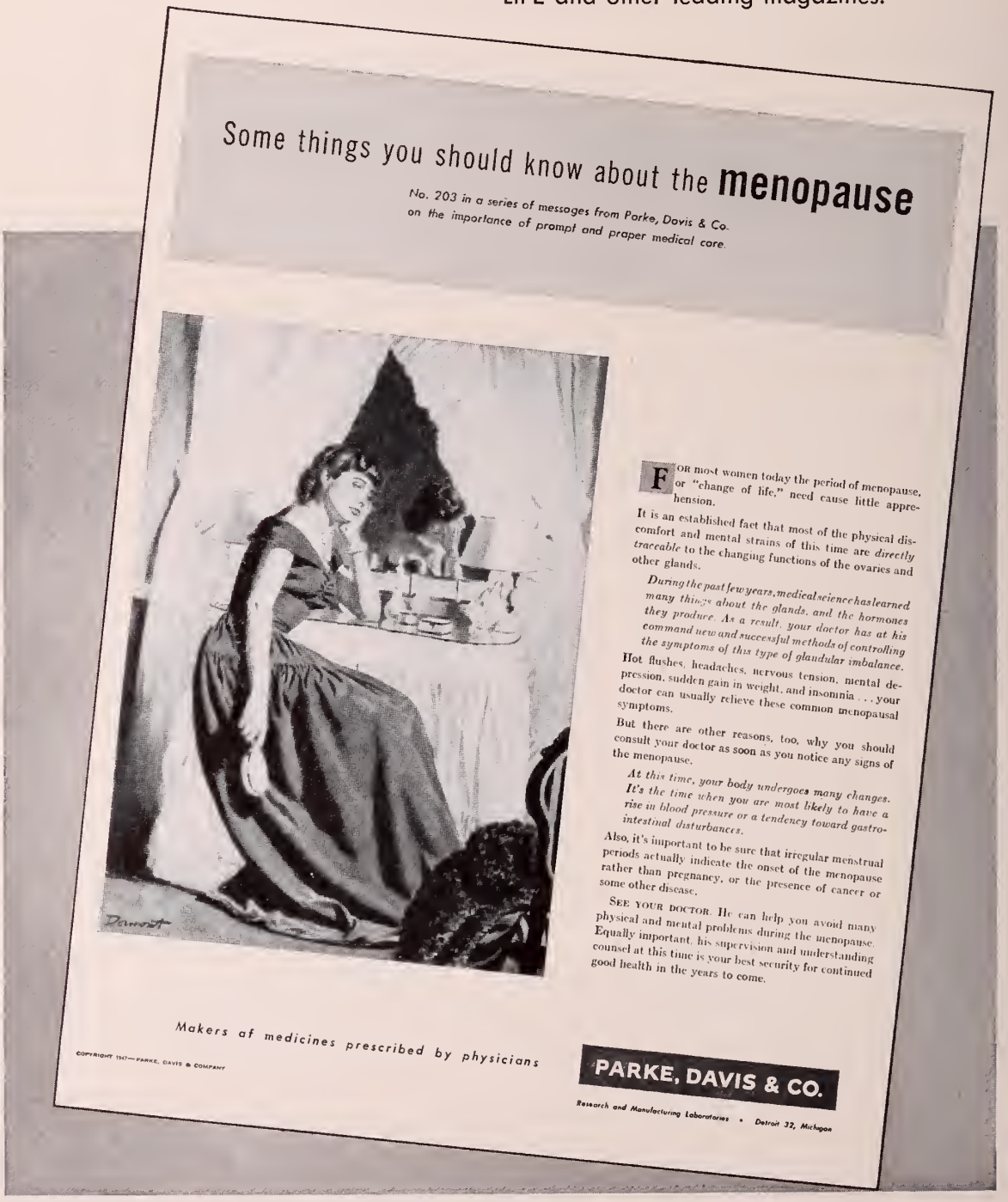
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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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IMPROVEMENT OF NURSING SERVICE THROUGH THE ESTABLISHMENT OF A LOCAL LEAGUE OF NURSING EDUCATION

MILDRED PINNER, M.S., R.N.*

The National League of Nursing Education is the organization of nurses whose primary concern is nursing education. This organization guides the education of the nurse both in theory and in practice. In areas where state and local leagues have been formed, nursing education as well as nursing service have been improved.

The National League of Nursing Education, the oldest of the national nursing organizations, was founded in Chicago in 1893 under the name of the "American Society of Superintendents of Training Schools for Nurses." The Society was incorporated in 1907. In 1912, the name was changed to the "National League of Nursing Education." It was not until 1932 that the League became the Department of Education of the American Nurses' Association.

Functions: The main functions of the National League, as stated by the Board of Directors, are to promote sound standards of nursing education and to help maintain the standards by:

1. Giving guidance in developing curricula for (a) basic nursing education; (b) advanced nursing education; (c) auxiliary workers in nursing.
2. Assuming responsibility for the accrediting of schools of nursing.
3. Advising on problems of administration which affect the education of nurses.
4. Making studies concerned with nursing education and nursing service, guiding schools in the use of these findings, and serving as a center of information for facts and figures related to these activities.
5. Preparing for publication materials that may be used by schools of nursing and other interested agencies.
6. Giving pre-vocational and vocational guidance in relation to nursing education.
7. Serving as the Education Department of the American Nurses' Association.
8. Accepting responsibility for advisory service to state boards of nurse examiners on educational matters.
9. Setting up standards of organization for state and local leagues and giving assistance in maintaining these.
10. Cooperating with the Association of Collegiate Schools of Nursing and the National Organization for Public Health Nursing on problems of college and university education.
11. Cooperating with the A. C. S. N. and the N. O. P. H. N. on problems of accrediting.
12. Working with the American Hospital Association and with medical groups concerned with the education of nurses and the organization of nursing service in hospitals.
13. Cooperating with other groups having similar or associated responsibilities.

Relationships: The League sets standards. As the Department of Education of the A.N.A., the League accepts the responsibility for giving advisory service to State Boards of Nurse Examiners. It carries on such activities as outlining entrance requirements and examinations, making surveys of schools, planning record forms, advising on educational matters referred by the A.N.A., preparing educational material and cooperating with national organizations on joint education projects.

The National League works from time to time with other groups. It has collaborated with the American Hospital Association to publish "The Essentials of a Good Hospital Nursing Service" and to make a study of the costs of nursing service and nursing education.

During World War II, the National League worked with the National Nursing Council for War Service and with the Division of Nurse Education, U.S.P.H.S., to help solve the problems that arose at that time. It promoted post-graduate clinical nursing education with emphasis on the prep-

* Educational Director, School of Nursing, St. Francis Hospital; President, Hawaii League of Nursing Education.

aration of head nurses and supervisors. Currently, the League is attempting to improve personnel policies for the general staff nurse.

Some of the League publications are:

The Nursing School Faculty—Duties, Qualifications, and Preparation.

The Administrative Cost Analysis for Nursing Service and Nursing Education.

Fundamentals of Administration for Schools of Nursing.

Problems of Collegiate Schools of Nursing Offering Basic Professional Programs.

How the National League of Nursing Education Serves You.

Membership: Members of the League are those who are engaged in advisory, executive or teaching positions in schools of nursing, public health nursing organizations, other disease preventive organizations, and government nursing services. At the Annual Convention in June, 1943, the League voted to admit lay persons to membership on the same basis as nurses.

The values derived from active participation by members in this League are numerous. Among the most important are the assistance secured through the service of the staff at headquarters and the opportunity to make social and professional contacts with nurses engaged in similar work in different sections of the country. The clarification of thinking made possible by such contacts is invaluable to any professional woman.

Since we in Hawaii are so far from headquarters, a local league will bring us in closer touch with national activities. In addition, we of the nursing school faculties will meet regularly to discuss our mutual problems in connection with rendering a community service through improvement of nursing education and nursing service.

THE TERRITORIAL LEAGUE OF NURSING EDUCATION

The nursing educators of the Territory of Hawaii have long felt the need of a local chapter of the League of Nursing Education. A request was sent to Miss Adelaide Mayo of the National League for the necessary materials and permission for organization. On January 20, 1947, a group of 40 nurses attended a supper meeting at the University of Hawaii to resolve that a local league be formed. Election of temporary officers resulted as follows:

Chairman, Mrs. Mildred Pinner
Vice Chairman, Mrs. Rosie Chang
Secretary, Miss Mary Doverspike
Treasurer, Miss Patience Clarke

Committee appointments were made as listed below:

Membership and Eligibility
Miss Annette Bilger, Chairman
Constitution and By-Laws
Miss Rae Barner, Chairman

The Constitution and By-Laws were patterned after those of the New York State League of Nursing Education. They were presented at a general meeting on February 17 and were approved after a few minor changes were made. They have now been forwarded to national headquarters for final acceptance.

Mrs. Mildred Pinner, *Chairman*

THE PRACTICAL NURSE

Practical nursing is growing in importance as a needed and respected vocation in the health field. In the past, the practical nurse has been generally ignored except for occasional witty remarks about the "Sairey Gamps" of the world. In the future, she will be a definite part of community health programs. Realistic and intelligent nurses will understand her place in the hospital and in the home and will take an interest in helping to plan for her training, supervision and development. The public, hospital administrators, and physicians are well aware of her importance. The professional nurses must meet the challenge of the situation and help to select, train, and use practical nurses who will be a credit to the nursing profession.

The day is gone when professional nurses could give care to all of the sick people in the hospitals and to most of those in the homes, just as the day is gone when the doctor could give all of the hypos and take all the blood pressures. We can no longer afford to keep our heads under the proverbial barrel, pretending that the practical nurse is insignificant in our nursing lives. She is here! And she will become increasingly important and valuable.

For this reason, the program committee planned a panel discussion on the practical nurse for the April 7th City and County Nurses' Association meeting. The highlights of this program are given below:

1. *Definition of a practical nurse.* Miss Myrna Campbell.
 A practical nurse may best be defined by stating the duties which she performs. The legal definition in the Territory is found in the Nurse Practice Act 103 S. L. 1945, which requires that the following persons be licensed to practice in the Territory of Hawaii:
 a. Persons who perform for hire any or all of the following duties in homes, hospitals, nursing homes and other institutions under the

supervision of a doctor or a nurse: Making occupied bed; bathing a bed patient; dispensing and collecting bed pans and urinals; feeding a patient; taking temperatures; doing simple dressings; transporting patients under anesthesia without assistance; giving enemas or any other treatments.

b. Persons who perform for hire any or all of the following duties in dispensaries, out-patient clinics or physician's offices: Taking temperatures; applying dressings and bandages; giving medications or treatments as ordered by the physician; interpreting doctor's orders to patient; caring for or accompanying post operative patients to home or hospital.

A ruling rendered by the Attorney General's office on Dec. 4, 1946, states that persons who are performing the duties stated above must be licensed regardless of title, civil service classification, or proportion of their time spent in such duties.

2. *The need for practical nurses in the Territory.* Miss Alfhild Christopherson, Dir. of Nurses, Kapiolani Hospital, Miss Evelyn Schoen, Plantation Hospitals.

There is an acute shortage of professional nurses, which makes the employment of practical nurses necessary.

There is an increased need for nursing service because of the increase in medical service to all people through expansion of hospitals, hospital insurance plans, public health departments, federal medical services, etc.

The problem of chronic illness is growing in the Territory as on the mainland.

Well trained practical nurses will improve the standards of nursing care for the chronically ill in both hospitals and homes.

The demand for practical nurses in homes is greater than can now be satisfied. This demand is due to:

Economic reasons.

The shortage of nurses professionally trained.

Maternity cases being sent home early from the hospital.

3. *Should practical nurses be licensed?* Miss Agnes Peterson.

Licensing of practical nurses will have the following result:

a. Afford protection to:

The public, from improperly trained people.

The practical nurse, by protecting the good one from the unscrupulous one.

The hospital, from poor nursing care and accidents.

Doctors and nurses, from dangers and worries of using poorly trained assistants.

b. If they are licensed it is possible to standardize the training and supervise the practice of practical nurses through the Board for the Licensing of Nurses in order to give a more even quality of nursing care to the community.

c. Setting standards for licensing stimulates the establishment of adequately financed and staffed schools for practical nurses. This will make it unnecessary for each hospital to train its own practical nurses.

d. It will raise the status of the practical nurse and give her more prestige in the community because she will be recognized and respected as a trained and licensed health worker.

e. Regulation of salaries and other personnel policies will eventually be possible.

4. *What is the situation in other states regarding licensing of practical nurses? Regarding schools of practical nursing?* Miss Rae Barner.

Nineteen states and the Territory of Hawaii have legislation dealing with practical nurses. Licensing is mandatory in only one state (New York) and in the Territory of Hawaii.

The legislation differs in each state, but most laws permit licensing, set up requirements for licensure, and protect the title under which the license is issued. The title varies, but the duties are much the same. Some states use Practical Nurse, others Licensed Practical Nurse, Attendant, Trained Hospital Attendant or others.

The way in which the law is administered differs. In New York State it is administered by the Department of Education as are all professional laws; in California and in one other by the Department of Health; in Tennessee by a committee made up of the State Board of Nurse Examiners and members of the State Nurses' Association. In most states the administration is by the State Boards of Nurse Examiners.

The usual requirements for obtaining a license in most states are: (1) minimum age 18-21 years, (2) good moral character, (3) passing of an examination. Some states (8, as of 1945) require completion of a course in an approved school for practical nurses.

Schools are approved by the state department or body of persons responsible for administering the law. In New York, Dept. of Education; California, Dept. of Health; in others by State Boards of Nurse Examiners.

There are many schools for practical nurses in existence. Most of them are commercial schools and are not approved by any official state or professional agency. At the present time, the American Nurses' Association has a record of only 53 approved schools. The requirements for entrance to the schools and the length of the course varies.

Usual requirements for entrance are: Age 18-50 years; graduation from elementary school—2 years high school preferred; good health; citizenship.

Usual requirements for completion of course: Length of course—9 to 18 months; 113 to 200 hours of classroom instruction; 6 months of practical work.

The schools are operated under the auspices of: Y.W.C.A.'s; private institutions and agencies; publicly supported vocational education programs.

New York State has the most complete legislation and the largest number of approved schools. The law requires licensing of practical nurses and sets up requirements for obtaining a license. Applicants must have completed a course in an accredited school or a course determined to be equivalent and have passed the state licensing examination. This equivalent clause permits licensing of those persons trained in other states or in one of the government services. Schools wishing to be accredited must register with the Dept. of Education, and meet minimum requirements as set up by the Commissioner of Education. At the end of the course, the student applies for permission to take the licensing examination. Application consists of: 1. the original qualifying

certificate, 2. a form giving identifying material, 3. a summary form filled out by the school. The license is issued after the applicant has passed the examination.

4. *How are practical nurses trained for their work in the Territory?*
 Miss Schoen—Plantation hospitals.
 Miss Clarke—Leahi hospital.
 Mrs. Broussard—Kaneohe hospital.
 Mrs. Gage—private duty.
5. *Legislation in the Territory of Hawaii.* Mrs. Helen Gage.
 Nurse Practice Act of 1945:

 This act makes licensure compulsory for all persons who nurse for hire. It provides two types of license, one for the registered professional nurse and one for the practical nurse. It also states that only graduates of "approved" schools may be admitted to the licensing examinations, which statement gives the Board definite responsibility for accrediting and supervising both professional and practical schools of nursing in the Territory. This implies the establishment of standards for nursing education on both levels, and continuous supervision of all nursing schools by means of visits to them.

 The law states "The Board shall have power in cases of emergency affecting the health and the safety of the community to waive in writing the requirements of qualifications and examinations . . . for a specific time fixed in such a waiver." In order that hospital service may not be disrupted and that persons now in practical nursing positions may not be deprived of their means of earning a living, the Board has established such a waiver for practical nurses until July 1, 1949. In licensing these practical nurses by waiver, the Board is not creating new nurses, but those already doing this work are being found and accredited. Further extension of the time limit will be made if necessary.
6. *The Practical Nurse Committee and the Community Nursing Council.* Mrs. Gardner Black.
 The Practical Nurse Committee:

 This Committee was appointed by the Board for the Licensing of Nurses. Its purpose was to formulate, and make recommendations to the Board concerning policies and regulations for a school for practical nurses. The members were as follows:

 Mrs. Gardner Black, chairman, Community representative.
 Mrs. Dorothea McClintic, former Assistant Director of Nurses, Leahi.
 Miss Myrna Campbell, American Red Cross Home Nursing Director.
 Miss Hope Romani, School nurse, Kawananakoa School.
 Miss Cecelia Conrath, Health Education Committee, Chamber of Commerce.
 Mr. W. H. Coulter, Vocational Guidance, Dept. of Public Instruction.
 Mrs. Hazel Mattson, former Superintendent of Kapiolani Hospital and of Children's Hospital.
 Miss Charlotte Kerr, Board for the Licensing of Nurses.
 Miss Josephine Valentine, ex officio.
 Miss Evelyn Schoen, H.S.P.A. Consultant.
 Mrs. Margaret Wong, McKinley High School Nurse.

 Six meetings of this committee were held over a period of three months. Between meetings the members did considerable research. After policies had been discussed and formulated and the various phases of the subject had been scrutinized from all angles, recommendations for minimum regulations were drawn up and submitted to the Board.

 The Community Nursing Council:

 This Council is the outgrowth of an idea originating with Dr. Miles E. Cary, principal of McKinley High School and Mrs. Margaret Wong of the same school. This same idea had been growing in the minds of many other community minded people, i.e., that the Territory needed more nursing care and that something should be done to provide for this specific need.

 At a meeting attended by professional and non-professional people it was decided to organize a council. The following officers were elected:

 President—Mr. Carl Flath.
 Vice-President—Mr. Tate Robinson.
 Secretary—Miss Miriam Keller.
 Board members—Mrs. Helen Gage, Dr. Miles Cary, Mrs. Gardner Black, Miss Laura Draper.

* * *

NURSES' ASSOCIATION, CITY AND COUNTY OF HONOLULU

The regular monthly meeting of the Board of Trustees of the Nurses' Association, City and County of Honolulu, was held in the Stella Lowrey Room of the Mabel Smyth Building on Monday, February 24, 1947, at 4:30 p.m.

Presiding: Miss Laura Draper.

Present: Mrs. Rosie Chang, Mrs. Myrtle Schattenburg, Miss Dorothy Blank, Miss Dorothy Nagano, and Miss Esther Kekela.

The minutes of the last meeting were read and corrected. Miss Kekela read the treasurer's report. Chairmen for the various standing and special committees were announced by the president, Miss Draper. It was announced that music for the social after the March 3 meeting will be furnished by seniors from the Kamehameha School for Girls. Letters from the Honolulu Consumers meeting were read. A delegate to the meeting will be appointed by the president.

Miss Blank brought up the subject of the monthly meetings of the Council of Social Agencies. She did not feel she gained much from attending these meetings. Discussion followed. The next meeting of the Council will be attended by Miss Draper and Miss Blank and they will evaluate the importance of representation from our association.

The Economic Security Program approved by the House of Delegates of the A.N.A. at the 1946 Biennial Convention, was discussed. The mem-

bers of the Board felt that the promotion of good hours, wages and personnel performance is a fundamental responsibility of a nurses' association. For an association to represent nurses as a collective bargaining agency, however, would require much stronger financial organization than the nurses have in the Territory.

According to Journal reports of the A.N.A. discussion of the Economic Security Program, the A.N.A. leaders believe that there will have to be representation through a union in states where the nurses' associations cannot act as bargaining agents.

The meeting adjourned at 5:30 p.m.

R. Chang, R.N.,
Secretary, pro tem

MINUTES OF THE MEETING OF THE NURSES' ASSOCIATION, CITY AND COUNTY OF HONOLULU

The meeting was called to order on February 3, 1947, by the president, Miss Laura Draper, at 8 p.m.

The president read the names of the new officers as follows:

President—Miss Laura Draper.
Vice-President—Miss Dorothy Nagano.
Treasurer—Esther Kekela.
Trustees—Violet Buchanan, Irma Burgess, Myrtle Schattenburg, Dorothy C. Blank, Sister Walter Damien, Rosie K. Chang.

In response to a letter from the Nurses' Association Territory of Hawaii requesting that the City and County Nurses' Association nominate a vice president, secretary, and three trustees, it was voted to submit the following nominations:

Vice President—Mildred Pinner, St. Francis Hospital; Mary Hugo, Kuakini General Hospital.
Secretary—Sadie Ching, Queen's Hospital; Olga Larson, Farrington High School; Margaret Makekau, Board of Health.

Trustees—Annette Bilger, Kuakini General Hospital; Esther Stubblefield, Board of Health; M. Schattenburg, Medical Group, office nurse.

A letter from the Nurses' Association Territory of Hawaii was read announcing the date of the annual convention:

Meeting of the Advisory Council, April 30
Business & Program Meeting, May 1 and 2, 1947.

At the president's suggestion nurses representing various types of nursing arose in answer to roll call as follows:

Institutional—22, School—3, Private Duty—6
Office—5, Industrial—4, General Public Health —30

Speakers at the meeting were: Kathryn Walter, Honolulu Chest X-ray Survey; Mrs. Elizabeth Bolles, Proposed Medical Care Plan.

The meeting adjourned at 9:45 p.m.

Teruko Sakakida, R.N.,
Secretary

NURSES' ASSOCIATION OF THE COUNTY OF HAWAII

During and since the war, The Nurses' Association of the County of Hawaii has held well-attended luncheon meetings at the Hilo Hotel. Miss Josephine Hall gave a rollicking description of her trips to the mainland at the February meeting. Senator Thelma Akana and Miss Hall were the delegates from Hawaii to the Biennial Convention of Nurses in Atlantic City. Miss Hall had the honor of presenting the flag of Hawaii when the various state flags were unfurled.

At the March meeting sixteen new members were admitted by ballot and one more by transfer. We are all making an earnest effort to bring in as many new members as possible, hoping to make this a banner year for both membership and interest in our association.

The Nurses' Association of the County of Hawaii voted at the May meeting that the secretary be instructed to write a letter to the Governor, Senator Akana and all the legislators from the county of Hawaii, voicing our disapproval of the Compulsory Health Insurance Bill which is to be proposed at this session of the legislature.

News Notes

Dr. Ireland, Miss E. Graham, Miss E. Renshaw, and Miss K. Scott, members of the staff of Puumaile Hospital enjoyed a week-end trip recently to Molokai and Kalaupapa Settlement. Miss Gerlind Horst, formerly of Puumaile, is now employed at Kalaupapa.

Miss Helen Higgins, charge nurse, at Palama Settlement was married in Hilo on Feb. 8, 1947, to Morgan Rogers, former Navy Commander and now Civil Engineer with Onomea Sugar Company.

Miss Moira Wilson has recently returned from an extensive trip to California and is now employed as Dr. H. E. Crawford's medical secretary.

Mrs. Dorothy Moll has sold her home on Halai Hill and has departed for the Mainland where she intends to make her home. We wish her best of luck, though we are all saddened by her going.

Miss Hall brought aloha and greetings from many friends of island nurses whom she met on the Mainland. Miss Theo Floyd, State Dept. of Health in Georgia; Miss Ana Grace Williams, formerly of Wilcox Memorial Hospital, and now located in Missouri; and Miss McLaughlin of O.C.D. and Queen's Hospital, send best aloha to all the nurses in the territory. Their memory of "Paradise" is still green, evidently.

Since the high waters of January and the evacuation of patients and staff to the Naval Hospital at the air-

port, Puumaile is a different place. Many patients were sent to Oahu and Maui and the remaining ones are in large wards. Six of the nursing staff live in one wing of the hospital in rooms never intended for quarters. But by dint of much imagination, improvisation, and using all and sundry pieces of furniture available, the place has been made quite livable.

MARY E. STANLEY, R.N.

DEPARTMENT OF HEALTH NEWS

All of the public health nurses and two plantation nurses have taken the instruction in the streamlined American Red Cross Course in "Mother and Child Care."

The following public health nurses have started teaching a similar course in their districts: MISS THELMA KUWAMOTO, Koloa; MISS JUNE TRIPLETT, Lihue; MRS. NELLIE HIYANE, Kapaa; MISS WILLA SHELL, Moloaa; and MISS MARVELL BYFIELD, Waimea.

A course is being planned for Hanapepe and will be taught by MISS RUTH IMAI at a later date.

Plantation nurses conducting classes in their districts are MISS MOLLIE KIRCHGASSNER, Kekaha, and MISS HELEN HETRICK, Kilauea-Hanalei.

MISS MARIAN ELIZABETH HAMILTON joined the public health nursing staff of the Territorial Department of Health on December 16, 1946. She is located at the Lanakila Health Center. Before coming to the Department of Health, she was at the St. Francis Hospital. She was formerly a public health nurse in California.

Lanakila nursing office welcomed four public health nursing students on February 3, 1947. They completed their first semester of theory at the University of Hawaii in January and are now getting their field experience. Students and their advisors are: NATSUE OSHIRO, DOROTHY NAGANO; MARTHA BACLIT, JOY SCHOCK; MIYOKO OKAHATA, MARGARET MAKEKAU; KIYOKO SAITO, ROSE HEE.

Students and advisors at Kapahulu Health Center are: ELEANOR PARK, DAISY MORITA; DOROTHY PARK, MARIE CHRISTINE MILLER; MARIAN SANFORD, BETTY OBERLIES; ELIZABETH MORISHIGE, KATHLEEN WOO; AGNES PARRISH, SHINO MURAKAMI; RHODY MANGASER, EMILIA CENTEIO.

MISS JOSEPHINE HALL, public health nurse in Kona, returned to duty on January 20 from a four-month vacation trip. She attended the biennial nurses' convention and observed public health nursing work in Detroit.

MISS BETSY BOYLIN, nursing supervisor on Maui, was recently appointed to the administrative staff of the Nursing Division of the Territorial Department of Health.

MISS NEVA HARRIS, former supervising nurse in Iowa, was appointed nursing supervisor for Maui county. She was honored at a nurses' staff meeting held on February 20 at which time workers of the different agencies were invited to meet her. Tea and cookies were served.

MISS JEAN DOYLE, public health nurse in Hilo, was married to Lyle Petry in the Pilgrim Chapel of Central Union Church in Honolulu on February 15 at 3:30 p.m. Mrs. Petry plans to continue her work with the Department of Health.

NEWS FROM HONOLULU HOSPITALS

Leahi Hospital:

In February 1947, four nurses enrolled in the second graduate course in tuberculosis nursing at Leahi Hospital. MISS CHARLOTTE KERR (Presbyterian Hospital, New York; B.A. Oberlin College, Ohio; M.S. Simmons College, Boston), as Director of Tuberculosis Nursing Education, has designed this course to instruct and prepare graduate nurses in the special field of tuberculosis. Students include:

MRS. PRESENTACION ALAVAZO (Mary J. Johnston Hospital, Philippine Is.)
MISS PHOEBE NAMBA (Kuakini General Hospital School of Nursing, Hawaii)
MISS DRUCILLA HEARLE (Montreal General Hospital, Canada)
MISS MARGARET MARY HUGHES (St. Margaret's Hospital, Massachusetts)

MRS. ALAVAZO and MISS NAMBA, staff nurses of Samuel Mahelona Memorial Hospital on Kauai, have been granted scholarships for this course by the Kauai Tuberculosis Association.

Leahi Hospital also has a two-months course in tuberculosis for affiliating student nurses from St. Francis Hospital and Kuakini Hospital.

MISS ELSIE K. Y. HO (Queen's Hospital School of Nursing, Hawaii; B.S. Western Reserve University, Ohio), has recently been appointed as supervisor of clinical instruction.

New staff nurses are:

MISS ELOISE TOLLE (T.C.I. & R.R. Employees Hospital, Alabama)
MISS YVONNE UTT (Central Washington Deaconess Hospital, Washington)
MISS DORIS KINGSLEY (Central Washington Deaconess Hospital, Washington)
MISS JOAN FEYEREISEN (St. John School of Nursing, North Dakota)
MISS RUTH MURPHY (St. Mary's School of Nursing, Minnesota)
MISS JOSEPHINE WOODMAN (Royal Victoria Hospital School for Nurses, Canada)

Maluhia Home

MISS ESTHER KEKELA (Queen's Hospital School of Nursing), has been appointed superintendent of nurses. Miss Kekela was formerly operating room supervisor at Queen's Hospital for many years.

Kapiolani Maternity and Gynecological Hospital announces the following new arrivals:

MISS ROSEMARY HOWARD (St. Luke's School of Nursing, Minnesota).

MISS BARBARA BEAM (Vassar Brothers Hospital, New York).

MISS HELEN PARROTT (Hawkes Hospital of Mt. Carmel, Ohio).

MISS EILEEN ALBI (B.S. University of Portland, Oregon).

MISS LEONE SPENST (St. Barnabas Hospital, North Dakota).

MISS LOUISE NAJLA ZEIKAK. Staff nurse, recently left Kapiolani Hospital. A native of Cairo, Egypt, she trained at the British government Hospital Training School in Haifa, Palestine. In 1939, Miss Zeikak accepted her first job in America, in Richmond, California. In fulfilling her desire for further travel, Miss Zeikak joined the Wahiawa General Hospital staff for nine months, before going to Kapiolani. Her next destina-

tion is San Francisco, and she plans to go to South America before long.

Kuakini General Hospital

Kuakini General Hospital announces the following changes in their staff:

Two recent graduates of the Kuakini General Hospital School of Nursing, Miss Esther Igarashi and Miss Sumie Taketa, have joined the staff.

Miss Jeanne Thacker and Miss Barbara Jean Summers, graduates of Wesley Memorial Hospital School of Nursing, Illinois, arrived on the Matsonia March 26, 1947.

Mrs. Jean Inouye (St. Francis Hospital School of Nursing, Hawaii) assumed duties in the operating room on March 3, 1947. She was formerly clinical night supervisor at St. Francis Hospital.

Miss Elizabeth Brown (New York Post-Graduate Hospital School of Nursing; B. S. Teacher's College, Columbia), has been appointed temporarily as science instructor in the school of nursing.

Miss Nancy Horikawa (Queen's Hospital School of Nursing, Hawaii), prior to her appointment as night supervisor, was head nurse in pediatrics.

Miss Hatsue Chinen (Kuakini General Hospital School of Nursing, Hawaii), is now evening supervisor.

Miss Lorrayn Hancock (White Memorial Hospital, California), formerly operating room nurse, sailed for New York on March 1, 1947, by way of the Panama Canal. She is planning to meet her fiance in New Hampshire.

The nursing education staff, including members of the faculty, supervisors, and head nurses, has 100 per cent membership in the National League of Nursing Education.

Children's Hospital

The following nurses have joined the staff of Children's Hospital since March 1, 1947:

Miss Pearl Derflex (Emanuel Hospital, Oregon).

Miss Jeanne W. Smith (University of Oregon Medical School, Department of Nursing, Oregon).

Miss Jean Stocker (University of Colorado School of Nursing, Colorado).

Miss Mary E. Clark (University of Colorado School of Nursing, Colorado).

Miss Jean M. Heiser (Silver Cross School of Nursing, Illinois).

Queen's Hospital

New arrivals in March were:

Mrs. Josephine Eschwege (Homoeopathic Hospital, Pennsylvania).

Miss Evelyn Vander Linden (Trinity Hospital, North Dakota).

Miss Marion Meyer (University of Minnesota, Minnesota).

Miss Barbara Jean Henningsgaard (University of Minnesota, Minnesota).

Miss Susan Jeffries (Union Memorial Hospital, Maryland).

Mrs. Elizabeth Tseu (Queen's Hospital School of Nursing, Class of 1934) returned as permanent evening nurse in obstetrics.

Mrs. Angeline Repetti (Queen's Hospital School of Nursing, Hawaii) returned as a night float after a year's leave of absence.

Miss Mary Hayes (Vanderbilt University, Tennessee).

Promotions were:

Mrs. Rosie K. Chang (Queen's Hospital School of Nursing, Class of 1942), clinical instructor to supervisor of Kinau I.

Mrs. Margaret Nelson (Regina School of Nursing, New Mexico), staff nurse to clinical instructor.

Miss Sadie Ching (Queen's Hospital School of Nursing, Class of 1943), operating room head nurse to supervisor.

St. Francis Hospital

The following nurses have joined the staff at St. Francis Hospital within the past several months:

Miss Alicia Birchaga (Mercy College of Nursing, California).

Miss Billie Harter (A. B. Merritt Hospital, California).

Miss Betty Lenneman (St. Luke's Hospital, Iowa).

Miss Joyce Lesselyong (St. John's Hospital, Illinois).

Miss Edith Rolfe (Owatonna General Hospital, Minnesota).

Miss Mildred Montgomery (Los Angeles County Hospital, California).

Miss Margaret Miller (B. S. Medical College of Virginia, Virginia).

Miss Betty Barker (Southern Pacific Hospital, California).

Post Graduate Students

Miss Michiko Kikugawa, graduate of Kuakini General Hospital School of Nursing, Honolulu, Hawaii, class of 1944, is taking a post-graduate course in obstetrics at the Cornell-New York Hospital, N. Y. Miss Kikugawa is the first graduate of Kuakini to go to the Mainland for further study in nursing.

Miss Mildred Kohatsu (Kuakini General Hospital, Class of 1945), will also enroll in the same course this fall, at Cornell. She is at present employed at Malulani Hospital, Maui.

Scholarships have been granted to:

Miss Kiyoko Yafuso (Queen's Hospital, Class of 1946), for two years at Teacher's College, Columbia, by the E. E. Black Scholarship Fund.

Miss Tamae Takaue (Queen's Hospital, Class of 1942), for one semester at the University of Pennsylvania by the Division of Maternal and Child Health.

NURSING TEXTBOOK AWARDS

Three collaborating authors of the University of Minnesota won the first award of $1,000 in a national contest sponsored by the McGraw-Hill Book Company for the most outstanding nursing books submitted to them before September 20, 1946. The authors were H. Phoebe Gordon, Assistant to the Director of the School of Nursing; Katherine Densford, Director of the School of Nursing and President of the American Nurses' Association, and Edmund G. Williamson, Dean of Students. Their book, *Counseling Programs in Schools of Nursing,* is scheduled for publication in May.

Nurse-Patient Relationship in Psychiatry, by Helen Willis Render, received the second award, $400. Bert I. Beverly, M.D., and Edith L. Potter, M.D., both of Chicago, shared honors for third place and were given $100 each. Dr. Beverly's book is called *A Psychology of Growth,* while Dr.

Potter wrote *Fundamentals of Human Reproduction.*

According to John C. Crossman, Manager of the Health Education Department at McGraw-Hill, the primary purpose of the awards has been to emphasize the importance of authorship in connection with other nursing pursuits. Announced early in 1945, the contest closed on September 20, 1946. Sixty-four projects submitted as entries were evaluated with care. Ten of these were completed and found acceptable for publication, thereby becoming eligible for the awards. In December, these manuscripts were laid before a panel of judges selected from among Leaders in Nursing Education.

The chairman was Sallie L. Mernin, R.N., Associate Professor of Nursing Education at the University of Chicago. The others were R. Louise McManus, Executive Officer, Division of Nursing Education, Teachers' College, Columbia University, and Lucille Petry, R.N., Chief of the Division of Nursing, U. S. Public Health Service. Their decision, based on factors of utility, factual content, organization, and presentation was announced to the successful contestants on December 23.

—*Trained Nurse and Hospital Review*
February, 1947

INDUSTRIAL NURSE CONVENTION—1947

The American Association of Industrial Nurses will hold the 1947 conference at Buffalo, New York, at the Hotel Statler from April 27 to May 4 in conjunction with the American Association of Industrial Physicians and Surgeons, American Association of Industrial Dentists and the National Government Hygienists.

The Association program will begin on April 29 and continue through the week. The program includes: a joint panel discussion with the American Association of Industrial Physicians and Surgeons on "Inservice Education of the Nurses in Industry" with representations by a medical director, by management and a nurse. There will also be a session devoted to six nursing papers by industrial nurses, one session on the structure study and one on collective bargaining.

—*Trained Nurse and Hospital Review*
February, 1947



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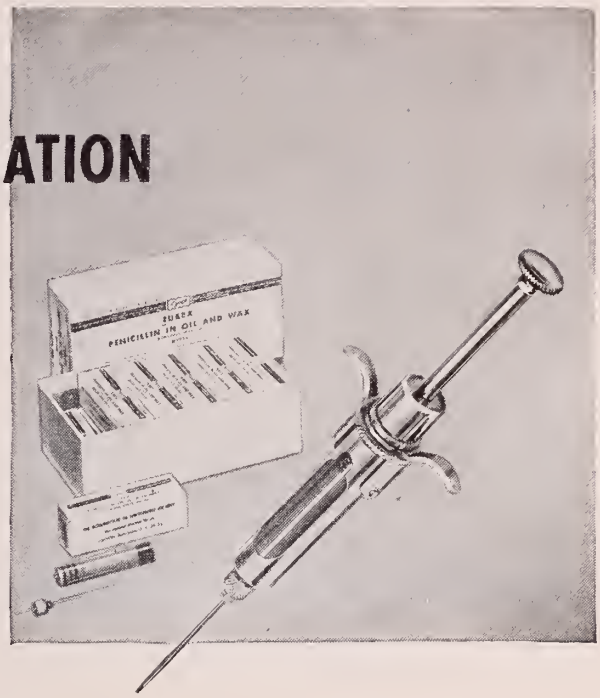
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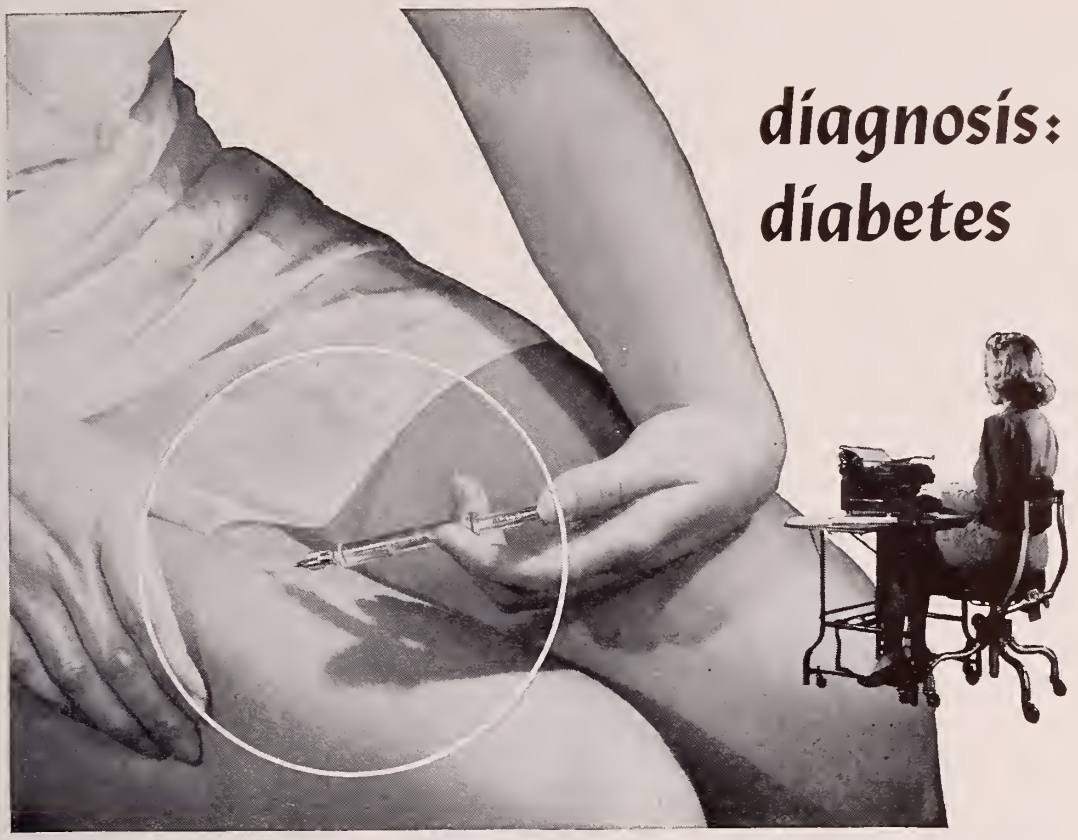
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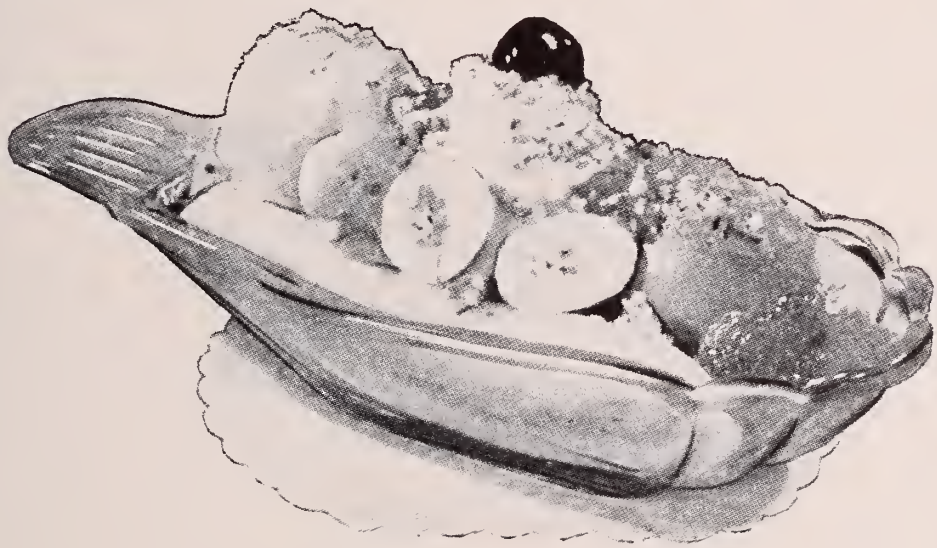
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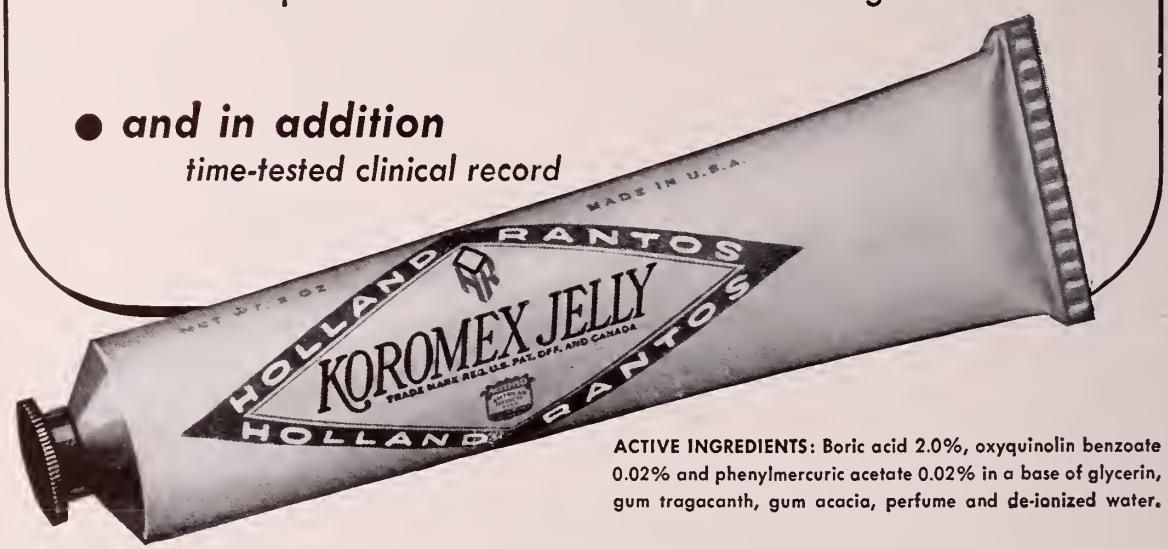
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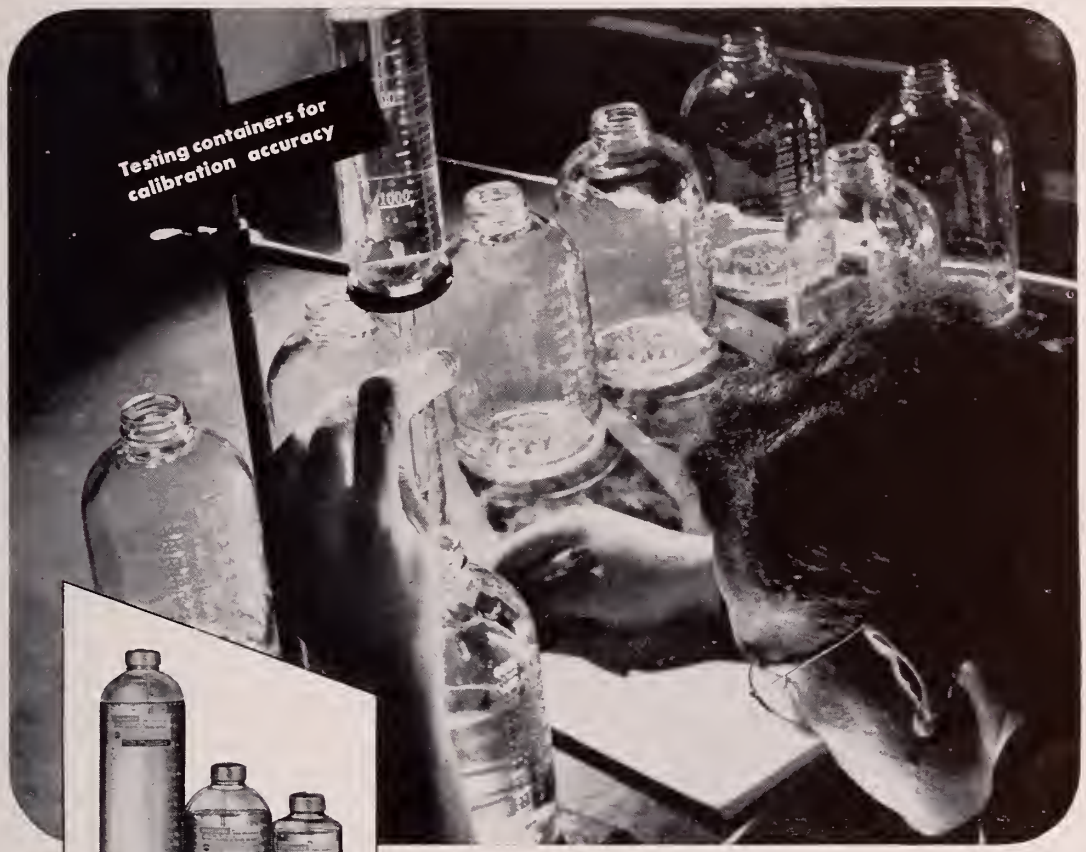
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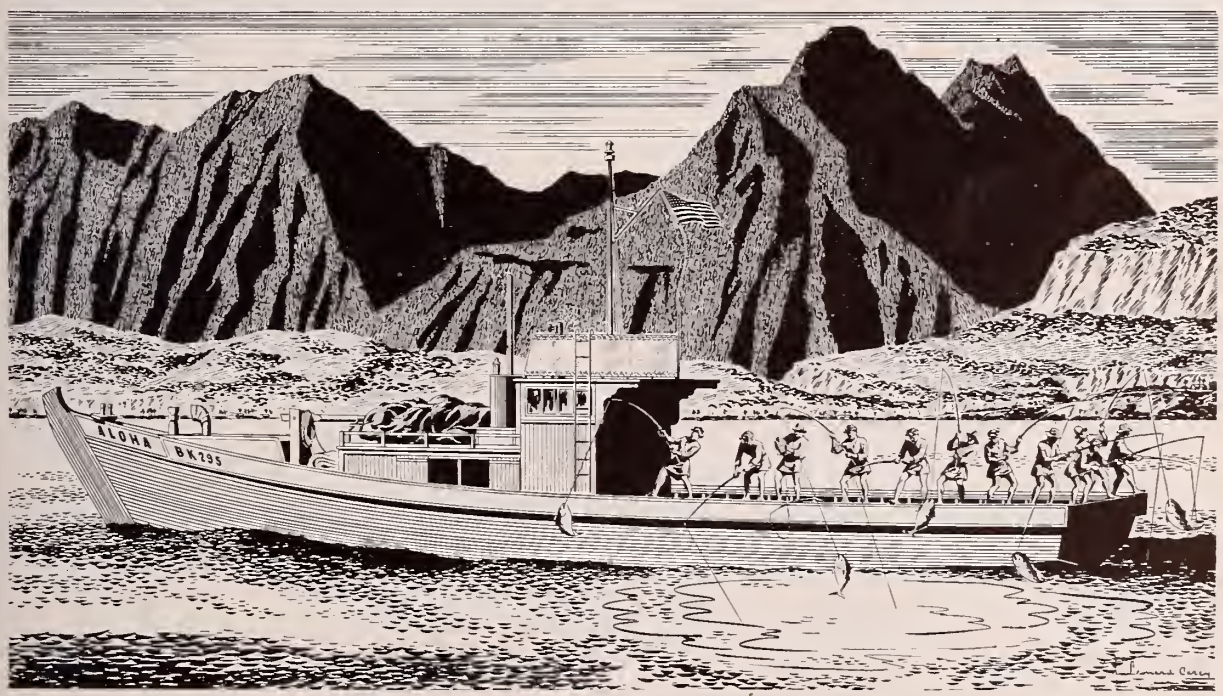
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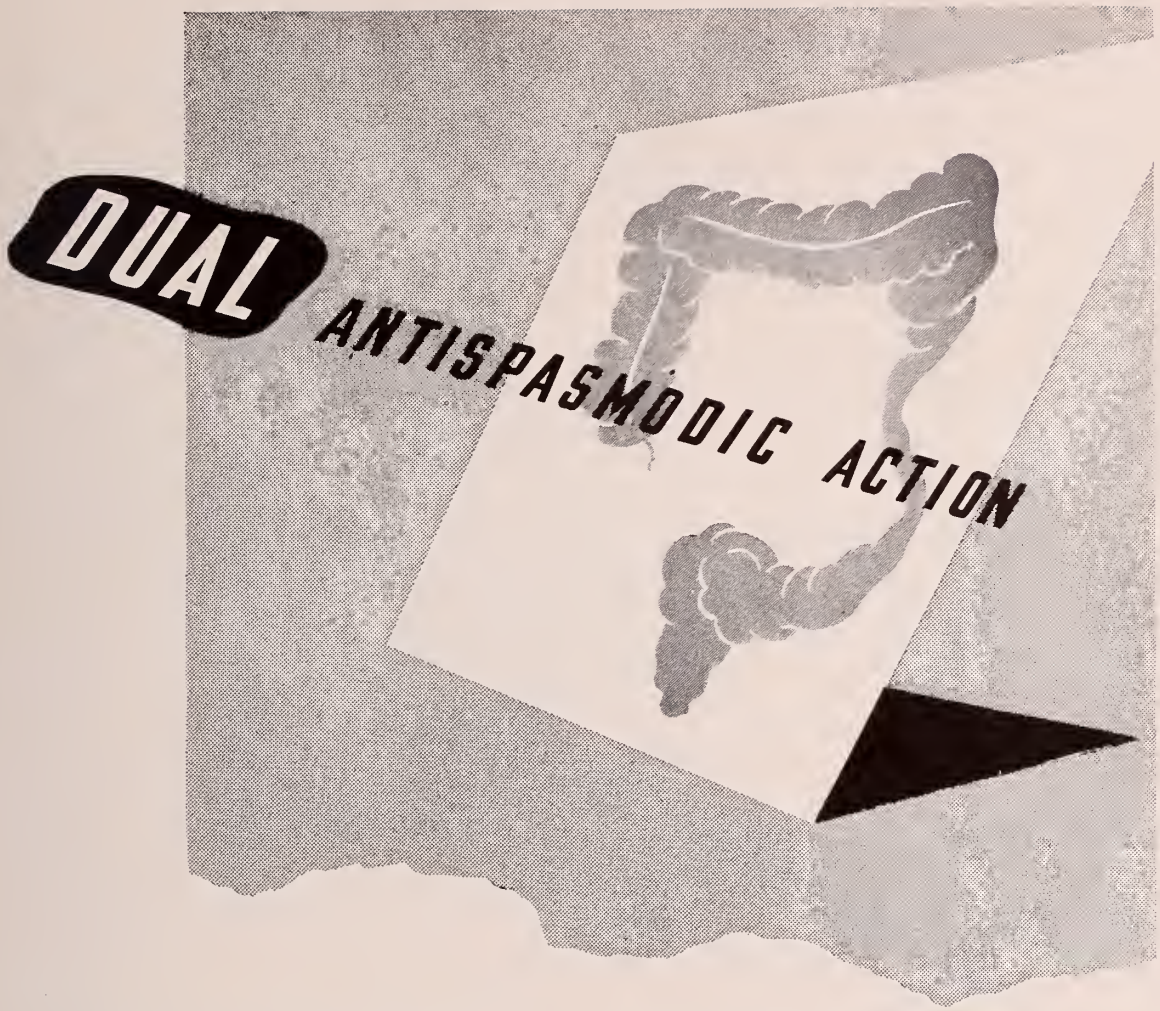


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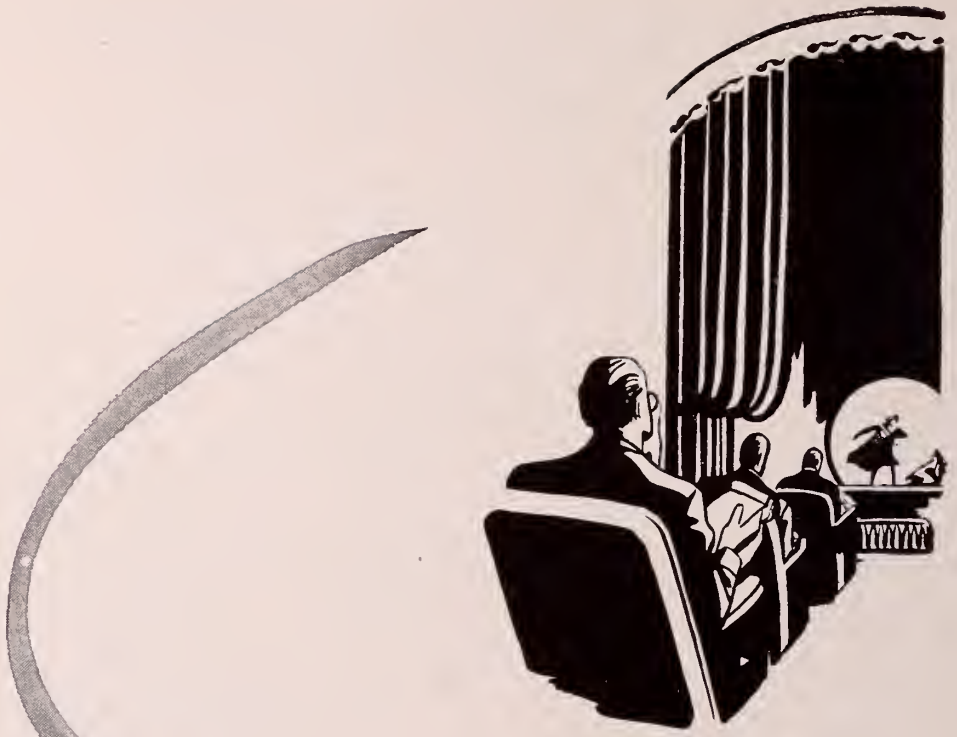
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1. Bickers, W.: Am. J. Obst. & Gynec. 51:100, 1946.

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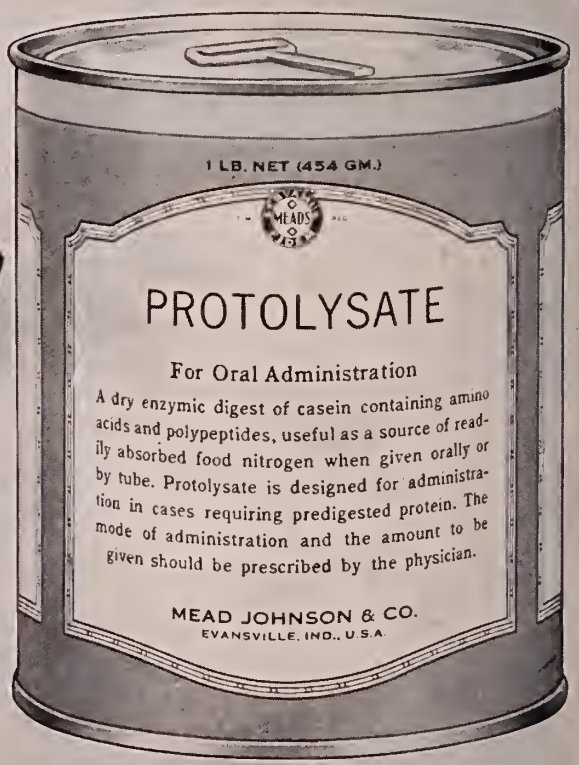
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CORONARY ARTERY DISEASE
AND
POSTGRADUATE LECTURES: PARTS I AND II
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A.M.A. MEETING
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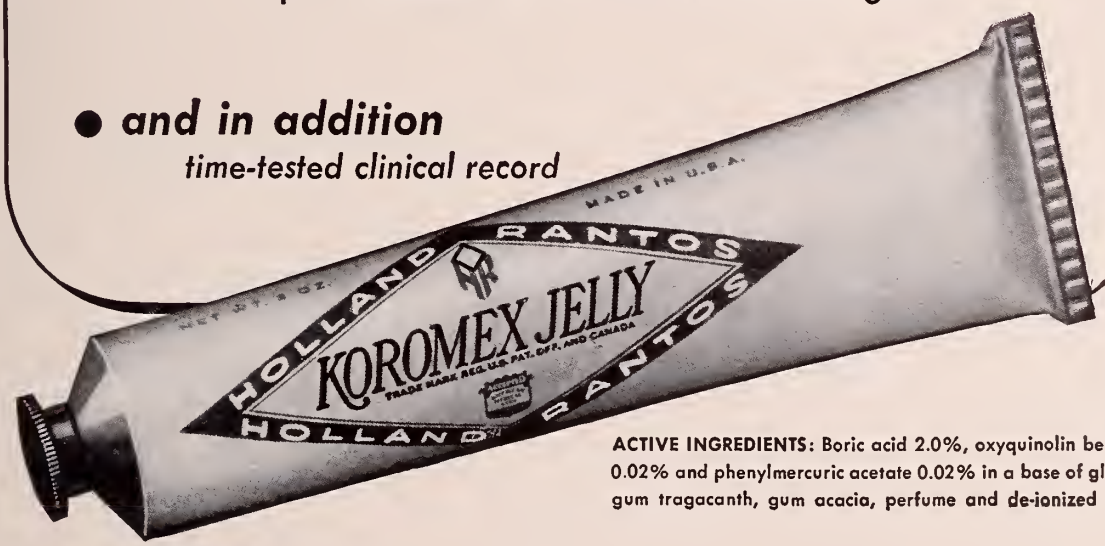
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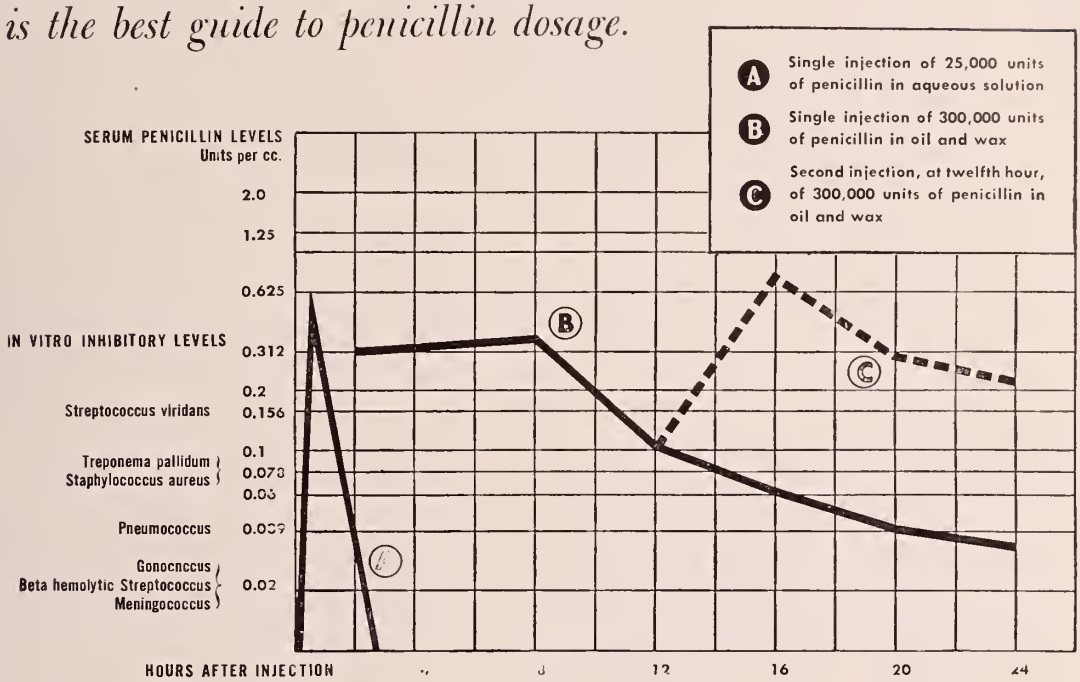
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*Int. Abst. of Surg. 83:1-12 July 1946

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1 J. South Carolina M. Assn. 52:186 (July) 1946.

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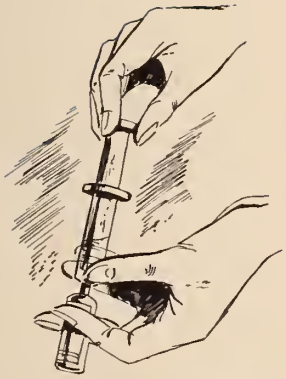
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Thirty Years' Experience With Coronary Artery Disease*

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WHEN a person over 40 years of age is examined by a physician, the two most important disease conditions to consider are cancer and arteriosclerosis. While manifestations due to these may occur in younger individuals, and of course they may have some important malady other than these two, nevertheless it is paramount to consider the two disorders mentioned, first of all.



DR. STURGIS

My purpose in presenting this discussion is to consider only one phase of the problem of arteriosclerosis, namely, the effect which this disease process has on the coronary arteries. Such pathological conditions account for some of the most important and widespread disease syndromes which are encountered in medicine in persons of middle age or older, regardless of sex or geographical location. These alterations in the coronary vessels of the heart are responsible for three main clinical syndromes, (1) arteriosclerotic heart disease, (2) angina pectoris, and (3) coronary occlusion with myocardial infarction. All three conditions are commonly observed in adults and are encountered by all physicians regardless of the field of medicine to which their practice is limited. In all three main types of coronary artery disease there is a gradual narrowing of the lumen of the coronary arterial vascular tree due to the development of arteriosclerotic changes which encroach on the lumen of the vessels. The consequence of this is a significant diminution of the blood supply which reaches the myocardium.

Physiology of the Coronary Circulation

It has been known for many years that the two main coronary arteries possess an abundant collateral circulation. Not only do the small arterioles of the right and left coronary arteries anastomose with each other, but numerous communications also exist between these vessels and the ventricular cavities. The amount of blood per minute which flows through the coronary circulation when the heart is beating quietly, is estimated to be about 350 cc., or the quantity which is held in a standard drinking glass and one-half. Other information of importance about the coronary flow in relation to heart disease is that the amount of blood passing through the coronary circulation is more directly related to the diastolic pressure of the systemic circulation than to the systolic; the caliber of the vessels is controlled through the autonomic nervous system; and distention of the stomach will reflexly diminish the coronary circulation, which accounts for the postprandial pain in angina pectoris.

It is known that in doses which are employed clinically the following drugs will *increase* coronary flow: the nitrites, papaverine, ephedrine, atropine, and perhaps morphine. Some have contended that morphine may cause a deleterious effect by constricting the coronary arteries if given to patients with coronary thrombosis, but this claim has not been supported by experience; in fact, I believe it is the one drug which should be given freely when this condition develops. If there is any doubt in the physician's mind about this point, then atropine 0.0006 gram (1/100 grain) can be added to each dose, which would counteract the alleged undesirable effect of morphine. It is of some clinical importance to know that there is no convincing proof that the xanthine compounds, such as aminophyllin, increase coronary flow in animals when given in doses comparable to those which are ordinarily administered clinically. Furthermore, it should be emphasized that digitalis and allied compounds in nontoxic doses are without effect on the coronary circulation. It is recognized, however, that the flow is diminished when the drug is pushed to the point of toxicity.

Arteriosclerotic Heart Disease

This is the most common type of heart disease observed in persons over 45 years of age. It is due to a gradual narrowing of the caliber of the small arterioles in the coronary system which provides the myocardium with its blood supply. This results in the slow necrosis of the muscle fibers and their eventual replacement with non-contractile fibrous tissue. This is responsible for an impairment of the ability of the myocardium to contract, and hence there develop the well known manifestations of myocardial failure: dyspnea,

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orthopnea, cyanosis, cough, edema of the ankles, chronic invalidism, and eventually death.

The natural course of arteriosclerotic heart disease is not necessarily brief; it may continue over a period of years. As it has its onset usually in persons past middle age, the life expectancy is, of course, usually less than a decade. I have, however, observed exceptions to this. There is always the possibility of a sudden blockage of a coronary vessel, causing a pronounced interference with the blood supply, resulting in cardiac infarction with sudden death, or the function of the heart may be so impaired that congestive failure develops and terminates fatally within a few weeks or months. Such events are unpredictable and cause the outlook to be uncertain.

I wish to summarize briefly the treatment of congestive failure with edema which occurs in this condition. In addition to bed rest it is our practice to employ the following forms of therapy. (1) Digitalis, 0.1 gram every 4 to 6 hours until the patient has been digitalized, which usually requires 1.5 grams or more in the average adult if digitalis preparations have not been given in the previous two weeks. (2) A diet in which all sodium chloride has been reduced to a minimum; at least all salty foods should be avoided and the patient should not use the salt shaker (the low sodium diet employed in hypertension may be used advantageously). (3) Ammonium chloride 3.0 grams (45 grains) in enteric coated tablets of 0.5 grams (7½ grains) each should be given three times each day for three days (total daily dosage 9.0 grams or 135 grains). At the end of this period mercupurin 2.0 cc. should be given intravenously, or mercuhydrin 2.0 cc. intramuscularly. The ammonium chloride is given continuously for three days and then omitted for three days and again resumed. At the end of each three day period the mercupurin or mercuhydrin should be injected in the dosage indicated until all of the edema has disappeared. (4) Patients with this form of heart disease should limit their activities to the point where dyspnea is not present as this symptom is the most reliable single guide of the capacity of the myocardium to function normally. (5) The use of morphine, sedatives, and oxygen should, of course, be considered when the proper indications are present.

Angina Pectoris

This condition may be defined as a syndrome produced by transient ischemia of the heart muscle resulting in a constricting pain in the chest which is induced by exercise and relieved by rest or by nitroglycerine. There is no extensive permanent injury to the myocardium as a result of these episodes, as evidenced by the fact that some persons live for a long period and suffer from innumerable attacks without indications of congestive failure. Furthermore, many patients never develop electrocardiographic evidence of damage to the heart muscle.

The symptoms of angina pectoris are due to two, or possibly three, mechanisms, as follows: A partial obstruction of the lumen of the coronary vessels resulting from arteriosclerotic changes occurs in almost all instances. This permits a sufficient quantity of blood to pass through the vessels when an individual is at rest, but the circulation to the myocardium is insufficient during exercise. This is the usual mechanism.

If an individual with angina pectoris succumbs, usually at necropsy there will be found extensive arteriosclerotic changes in the coronary vessels. This is not always the case, however, for in occasional instances they are smooth. Two suggestions have been made to explain this apparent discrepancy. One, that in such cases there is an aortic insufficiency which causes a low diastolic pressure. As it is known that the coronary flow is proportional more to the diastolic than the systolic pressure, this may be the true explanation of an inadequate circulation under these circumstances. A second explanation is controversial. Does an actual spasm of the coronary arteries occur, and consequently is the myocardium deprived temporarily of its blood supply for this reason? This is a difficult question to answer definitively. The most convincing evidence in support of it which I have observed personally is the induction of the electrocardiographic evidence of myocardial ischemia at will in an individual by cigarette smoking.

The Diagnosis of Angina Pectoris

It is not my purpose to discuss fully the diagnosis of angina pectoris because the classical picture is well known. I should like to emphasize, however, several points of importance. In the first place, pain in the chest simulating angina pectoris may be due to a hiatus hernia or to referred pain from the vertebral column, and a number of other conditions. Second, "Any pain within two feet of the heart (I believe Richard Cabot is responsible for this emphatic statement) which is *induced by exercise and relieved by rest* is probably angina pectoris." This is perhaps a slight exaggeration but it is justifiable in the interests of emphasis. Third, sudden death may occur in patients with angina pectoris without complete closure of a branch of the coronary artery. The mechanism in such cases is a relative ischemia due

to greater demands by exercise for blood in the myocardium than can pass through a narrowed but not completely closed coronary vessel; this causes ventricular extrasystoles, and in some instances ventricular fibrillation with instantaneous death.

Treatment of Angina Pectoris

It is not my intention to enter into a discussion of the detailed treatment of this condition. Several points, however, deserve emphasis. In the first place all such patients should be given nitroglycerine in doses of 1/200 to 1/50 of a grain, to be placed under the tongue in order to control an attack. The average dose is 1/100 of a grain, but if relief is not attained with this, then a larger dose should be given. This type of therapy is well known, but not so many physicians appreciate that the medication can be employed prophylactically. By this is meant that in some patients who have frequent attacks, nitroglycerine will not only control the attacks but also often will prevent them so effectively that for several hours, more than average exertion can be indulged in without producing symptoms. Second, I should like to emphasize that the xanthine drugs such as aminophyllin have been disappointing in their effect, in my experience. There is no harm, however, in giving such medication a trial in the form of 0.2 grams (3 grains) of theophyllin with sodium acetate, four times daily for an indefinite period.

Finally, how much exercise should these patients take? I know of a physician with angina pectoris who exercises to the point of precordial pain each day, on the theory that it promotes the formation of a collateral circulation. This may be correct, but I should fear the possible development of ventricular fibrillation with instant death. On the other hand, it is my opinion that patients with angina pectoris should attempt to carry out a reasonably normal existence when this is not productive of important symptoms.

Cardiac Infarction

Infarction of the heart with necrosis of the myocardial fibers results from shutting-off of the blood supply. This may result from one of two processes: (1) The usual one is a complete closure of a branch of the coronary vascular tree by a thrombosis formation on an arteriosclerotic basis. In a certain unknown but probably important number of patients, this is in part due to a subintimal hemorrhage in the blood vessels, which must be interpreted as the end result of a progressive arteriosclerotic process. The sudden closure of a vessel by this process has nothing to do with effort. It may occur entirely independently of physical exertion. It has been emphasized in support of this view, that the percentage of attacks of coronary thrombosis which occur during sleep, rest, or when indulging in mild, moderate or strenuous exercise, corresponds to the percentage of time usually spent in these respective states. (2) A second mechanism causing infarction of the myocardium may occur, and the knowledge that this may be responsible for the condition is not widely appreciated by the profession. This is associated with strenuous exercise and develops as follows. There is a partial occlusion of a coronary vessel due to arteriosclerosis, but at rest a sufficient quantity of blood passes through the narrowed channel to supply the myocardium. With the added demand due to exercise, either mild, moderate or strenuous, the blood supply is inadequate to supply the needs of the myocardium and hence a prolonged relative ischemia results. It was apparently this type of mechanism which resulted in infarction in the younger group (18 to 35 years) in the army during the recent war.

The Clinical Aspects of Coronary Thrombosis

The ability of the clinician to recognize a cardiac infarct with a high degree of accuracy during life has been developed during my own professional lifetime. Although the condition had been recognized many years before, it is often overlooked that Dr. George Dock, when Professor of Medicine at the University of Michigan, in 1896 published a paper in which he demonstrated that such a diagnosis could be made during life and confirmed by necropsy. In 1912 and again in 1919, James B. Herrick accurately described the clinical aspects of the condition and initiated an interest in it which rapidly grew until it became recognized as a well established clinical syndrome. In 1917 and later, Samuel A. Levine and Henry A. Christian of the Peter Bent Brigham Hospital in Boston, in a series of papers directed the attention of the clinician to the disorder and emphasized its importance and the diagnostic criteria which were reliable in detecting it during life. Of greatest value is the monograph on coronary thrombosis published by Levine and Brown in 1929.

One of the most important advances in more recent years has been the recognition that characteristic electrocardiographic changes occur in association with this condition, which are of great assistance from a diagnostic standpoint. Of additional help was the development of chest leads by Wolfurth in 1932. It seems amazing when one takes into account the frequency and serious-

ness of the disorder that a detailed and authoritative description of it did not appear in a textbook of medicine until the year 1931.

Of importance in the diagnosis of coronary thrombosis is the fact that it usually occurs in individuals who are over 40 years of age, and the incidence increases with advancing years. This idea has remained too fixed, however, in the minds of many physicians, and accounts for a mistaken diagnosis in some instances. The revealing recent experience in our army indicates that it can occur with a startling frequency in young persons. A recent report includes several hundred soldiers between the ages of 18 and 39 years who succumbed to the condition. In about 75 per cent of these cases there was not complete closure of a branch of the coronary artery but the infarction resulted from a partial obstruction and a relative ischemia. In a number of cases the attack came on after strenuous exercise, such as a long march. Furthermore, a significant percentage were somewhat obese, but probably most important of all, from an etiological standpoint, was that 40 per cent of them gave a history of organic heart disease in one of the consanguineous relatives, as compared to a history of such a malady in only 5 per cent of the controls (amputees).

It is probably important that the condition is more likely to occur in persons who are overweight, with broad shoulders and a short neck. At one time I thought there was certainly a constitution which seemed to favor the development of the condition; but further experience has taught me that it may occur in persons of any size or body build. It is true, however, that coronary thrombosis is less common in slender persons than those who are obese. It occurs much less frequently in women than in men, and it has been exceedingly *uncommon* in my experience in women under 50 years of age unless there is an associated hypertension. It is increased in incidence in patients with conditions which are more likely to be associated with arteriosclerosis, namely diabetes or myxedema. Opinions vary concerning the frequency with which an attack is preceded by the symptoms of angina pectoris as estimates range between 50 and 75 per cent of the patients. Hypertension undoubtedly plays a role in the etiology in some of the cases. It is probably conservative to say that a definite hypertension exists in approximately one-third of the patients who develop cardiac infarction. Another point I should like to emphasize is that it is rarely encountered in patients who have established auricular fibrillation, although the latter state may develop in association with myocardial infarction. Nor is it commonly present in patients with congestive failure but more often in persons in whom the heart is well compensated.

The Pain of Myocardial Infarction

The cardinal clinical feature of this disorder is thoracic pain, which is usually associated with a sense of pressure or constriction. It may be present for as short an interval as thirty minutes, but much more commonly persists for a period of hours or several days. The intensity of the pain varies widely, depending on the susceptibility of the patient to pain, the accuracy with which the history is obtained, and whether or not the patient was given morphine in large doses early in the attack and freely throughout it.

It is surprising how mild the discomfort may be. One of my physician friends went on a fishing trip during an attack and erroneously attributed the discomfort to a slight traumatic injury to the thorax which he had sustained a few days before. After two days on the trip, in which his activity was not limited to any great extent, he came to the hospital and died a few days later. Necropsy showed an extensive infarction involving almost the entire left ventricular wall. In the necropsies which I observed many years ago, I was impressed with the fact that many of the patients who succumbed showed the scars of previously healed infarcts although in the clinical histories of the patients there was often nothing to indicate when the attack had occurred.

It should by no means be inferred that the pain of cardiac infarction is always mild. This is not true, for it may be so terrible as to resist large doses of morphine, and in some instances the indication for relief may be so urgent that morphine should be given intravenously to insure an immediate effect. The intensity of the pain may be classified as follows: None, 3 per cent; mild, 25 per cent; moderate, 50 per cent; severe, 22 per cent. Other characteristics of the pain are as follows. In about 3 per cent there is *no pain;* in another 3 per cent it may be *limited entirely to the abdomen:* in 14 per cent it occurs in both the abdomen and thorax; in about one-half the cases it is referred down the left arm; in 1 per cent it is observed in the chest but radiates only to the right arm; in 16 per cent to both arms and in 16 per cent to the back.

In a study of 375 of our cases of myocardial infarction at the University of Michigan Hospital there was *no* associated pain in 4.5 per cent, which is slightly higher than the figure usually given for this aspect of the disease. The principal symptoms which occurred in the absence of pain were, in order of frequency, dyspnea, acute nausea and

vomiting, sudden fainting or collapse, no symptoms, vertigo, hemiparesis. In some instances, a patient may develop a rapid progression of all of the symptoms of congestive failure without pain, due to the development of a myocardial infarction.

Manifestations of Coronary Thrombosis, Other Than Pain

It should be reiterated that pain of one kind or another occurs in almost all patients with coronary infarction. The other evidences of the disorder will be considered only briefly. They are, in order of importance, tachycardia, 98 per cent; evidence of early congestive failure, such as dyspnea, dilatation of the neck veins, rales at the lung bases, distant heart sounds, 75 per cent; cyanosis, 55 per cent; hypotension, 75 per cent; shock, 54 per cent; gallop rhythm, 20 per cent; and pericardial friction, 16 per cent.

Usually within twenty-four hours the following signs develop, which are considered to be on the basis of tissue autolysis: fever, 100 per cent; tachycardia, 98 per cent; increased sedimentation rate, 95 per cent; leukocytosis, 95 per cent. As will be discussed later, there are definite changes in the electrocardiogram in about 85 per cent of the cases, but the incidence depends to some extent on how frequently the electrocardiograms are repeated, whether chest leads are employed, and who is interpreting the curves.

The Differential Diagnosis

It is usually not difficult to recognize typical clinical examples of coronary thrombosis. There are a number of types of diagnostic errors made. One is in patients who are obviously ill and their condition is recognized as grave. The three conditions to keep in mind in these patients, which may be confused with the syndrome of coronary thrombosis, are pulmonary infarction, dissecting aneurysm of the aorta, and an acute pericarditis. Another type of diagnostic error is in patients who are younger than those the physician usually considers to be affected with this malady (18 to 35 years), or in those in whom the pain is entirely absent (3 per cent), is entirely abdominal (3 per cent), or is only mild (25 per cent).

Another and a highly important differential diagnostic problem arises in patients with coronary thrombosis who present clinical picture simulating an acute condition in the abdomen which might require surgery. In such a state it is sometimes perplexing to determine if the disorder is above or below the diaphragm. If a patient with a myocardial infarction is subjected to an exploratory laparotomy as the result of an erroneous diagnosis, the outcome is usually fatal. In deciding such a question one must keep in mind the history of previous attacks of thoracic pain related to exertion; the fact that the pain of coronary infarction is almost always, in part at least, in the thorax; that there is no abdominal tenderness or muscle spasm; that a scout film of the abdomen will not disclose air under the diaphragm as so commonly observed in perforated peptic ulcer; and that repeated electrocardiograms (standard and chest leads) will usually demonstrate some conclusive change which is characteristic or highly suggestive of myocardial infarction.

Finally, Herrick has emphasized that in the past the diagnosis of myocardial infarction was likely to be overlooked, but now the tendency is to conclude on too scanty evidence that the patient has the condition when it does not exist. He discusses this in an article in the *Annals of Internal Medicine* (11:2079, 1938) with the title "On Mistaking Other Diseases for Acute Coronary Thrombosis." In this he mentions some thirty other conditions which may be mistaken for the condition. In addition to those to which I have already referred, he mentions the following: arrhythmias (paroxysms of extrasystoles), psychoneurosis, malingering, syphilitic aortitis, pneumothorax, pleurisy, pancreatitis, acute spastic colon, hernia of the diaphragm, gastric crises, herpes zoster, and arthritis of the spine. This article by Herrick, which every physician could read with profit, concludes with this sagacious advice with reference to the diagnosis of myocardial infarction: "Some of our most embarrassing and costly errors are due to the fact that for the moment we forget the things that we know full well. That in looking for the unusual we overlook the obvious. Merely to think of the other disease is to avoid the error . . . "

The Electrocardiographic Changes in Cardiac Infarction

It is not my intention to enter into a discussion of the relation of the electrocardiogram to the diagnosis of myocardial infarction, except to emphasize a few points of paramount importance. In the first place, the study of a patient with pain in the thorax for which the explanation is not obvious is incomplete unless careful and complete electrocardiographic studies are done. By complete studies I mean the use of chest leads, and also repetition of electrocardiograms at intervals to determine if the condition responsible for abnormal curves is changing. Serial electrocardiograms are of as much importance in the diagnosis of myocardial infarction as changing titres in

various infections and serial x-ray films in the diagnosis of pulmonary tuberculosis.

It is probably true that if an electrocardiogram with standard and chest leads is taken immediately after the patient experiences the pain thought to be due to a myocardial infarction, and this is repeated on about the third and tenth days, and all of the curves are normal or at least not distinctive of the condition, that diagnosis may be eliminated in most instances.

In general, there may be said to be three main types of changes: (1) A high take off of the "ST" segment, which denotes injury to the myocardium; (2) well developed "Q" waves, which indicate necrosis of the myocardium; and (3) inversion of the "T" waves, which is thought to be due to injured or dying muscle at the periphery of the infarcted area. In some cases, none of these changes may be present, and the only electrocardiographic evidence is the presence of small "QRS" complexes.

It should be emphasized that *anterior* infarcts are best demonstrated by the electrocardiogram with *chest* leads, and *posterior* infarcts with *standard* leads. The practitioner cannot consider having electrocardiographic tracings made in all of his patients, but he can appreciate their great assistance in those who may be suffering from myocardial infarction, and secure the assistance of a cardiologist in consultation in the appropriate cases.

Treatment of Coronary Thrombosis

The first immediate indication in the treatment of myocardial infarction is the relief of pain. For this, morphine, 0.016 gram (1/4 grain) with atropine, 0.0006 gram (1/100 grain) should be given subcutaneously every one-half hour until the pain is controlled. If pain is intense one should not hesitate to give 0.010 grams (1/6 grain) of morphine intravenously in order to produce an almost instantaneous effect. In my opinion it is wise to give morphine freely during the first three or four days of the patient's illness. At the end of this time 0.1 gram (1½ grains) of sodium phenobarbital subcutaneously may be substituted, and finally the patient should be given phenobarbital 0.032 grams (½ grain) with Seconal 0.1 gram (1½ grains) at night for sleep. If cyanosis appears and there is dyspnea, then the patient should be placed in an oxygen tent.

If the facilities for doing prothrombin time daily are available, then I believe that dicumarol should be administered. The purpose in giving this drug is to reduce the coagulability of the blood in order to prevent (1) an extension of the infarction, (2) the formation of mural thrombi in the ventricular cavity with resultant emboli in the systemic or the pulmonary circulation, and (3) the development of thrombophlebitis which may result from the rest in bed. Although further observations are necessary to evaluate the value of dicumarol therapy in acute myocardial infarction, sufficient information is now at hand to have induced us to use it routinely at the University of Michigan Hospital in all such cases; and I can honestly state that if I developed such a condition I would desire this type of medication.

The Use of Digitalis

There is some difference of opinion concerning the use of digitalis in patients with acute myocardial infarction. I believe that this drug is indicated in the presence of definite evidence of congestive failure as indicated by pronounced dyspnea and cyanosis, persistent rales at the bases of the lungs, enlargement of the liver, and eventually edema of the extremities. I hesitate to administer digitalis unless there is cardiac enlargement, except when the patient develops auricular fibrillation or auricular flutter. When digitalis is indicated, it is my opinion that it should be given in full digitalizing doses and then be followed by a maintenance dose of 0.1 gram (1½ grains) daily. Special care should be taken not to over-digitalize these patients because then, and only then, there results a decreased blood flow through the coronary vessels.

The Use of Xanthine Drugs

There is conflicting experimental and clinical evidence concerning the value of these drugs in treating patients with myocardial infarction. By some it is claimed that they improve the flow through the coronary vessels and promote the formation of a collateral circulation. To me neither the laboratory nor the clinical evidence is convincing. Nevertheless, there is so much at stake in these patients that I believe their use is advisable. It is my custom to administer, to all cases, theophyllin with sodium acetate in doses of 0.2 grams, four times daily, for a period of weeks.

The Period of Rest in Bed

Two facts are well established concerning the repair of myocardial infarction. One is that the maximum softening of the myocardium occurs between the fifth and seventh days after the acute process occurs, and hence this is the time of the greatest tendency to rupture. The second is that healing with fibrous replacement is not complete

for about three months. Some patients with a mild attack of coronary thrombosis do not consult a physician and may not even rest in bed, without apparent resultant injury. On the other hand, it does not seem to be sound judgment to place an undue strain on the injured myocardium if it can be avoided for a period of several weeks. More recently it has been my custom to confine the patients to bed for a period of two or three weeks, and then, if all fever, tachycardia and other significant symptoms have disappeared, to permit them to sit up on the edge of the bed for a few minutes, the following day in a chair, and gradually move about the room. Certainly their activities should be *strictly* limited for a period of three months, but I see no objection in the absence of symptoms to permitting them to be ambulatory in a restricted sense for at least a major portion of that time.

The Prognosis in Myocardial Infarction

All of my interns and residents are instructed to inform the relatives of patients with myocardial infarction that the outlook in every case is "uncertain." I know of no better use of this word. In every case, the possibility of sudden death must be considered. In addition, all prognostic criteria may fail for I have seen cases which have been regarded as hopeless, recover, and survive for a period of years. On the other hand, I have had the shock of observing a patient with a "mild" attack, if that term can ever be applied to this malady, suddenly and unexpectedly expire.

In general it is my belief that one can make the following definite statements in regard to the prognosis. That in any given case the chance of a fatal outcome terminating the initial attack is between 20 and 30 per cent. Ominous as this may sound, it is much better than our former belief of some years ago that approximately one-half of the patients succumb in the initial attack. Of course it must be conceded that each succeeding coronary episode adds an appreciable risk that the condition will be fatal.

In regard to the future of these patients after having recovered from the acute attack, it is my opinion that the outlook is more favorable than had been previously supposed. If a patient recovers from the acute episode, and there is no evidence of congestive failure or angina pectoris, I believe that the chances of survival for a period of ten years are good. When one considers that the condition occurs most commonly after 50 years of age, this is somewhat encouraging because the outlook for life in any supposedly healthy person after 50 years is somewhat uncertain.

It is my opinion that the prognosis is less favorable in patients with hypertension who have not previously had angina pectoris. It is possible that this is because in many instances the hypertension has spent the cardiac reserve before the patient suffers from the myocardial infarction, and because the previous narrowing of the coronary arteries to the point where the symptoms of angina pectoris have been produced, has *favored* the development of a collateral circulation. For reasons about which I am not clear, it has also been my experience that the small percentage of patients who have a painless myocardial infarction have a poor prognosis.

While much of what has been said about coronary thrombosis is discouraging, nevertheless, it is possible to cite cases who have survived their initial attack and have led useful and reasonably active lives, with few, if any, symptoms, for periods of 15 to 20 years. Paul White reported one patient who had undoubted attacks of myocardial infarction at the ages of 48 years, 51 years, 59 years and 63 years. He died at the age of 73 years of congestive failure. Hence this cardiac illness extended over a period of 25 years before it proved fatal.

One disappointing feature of this disease is our inability to state with assurance what can be done to avert further attacks. It is my opinion that these patients should be advised to desist from smoking, to drink little, if at all, to reduce their weight to normal, if obese, and to refrain from strenuous exertion. Further than this it is not possible to suggest any form of treatment which can be shown to be helpful in preventing further attacks. It is my custom to instruct my patients in the above matters and treat whatever complications which may be present, but in general to encourage them to return to a normal existence as soon as possible. More than once such patients on their own responsibility have made radical alterations in their business affairs. Plans for an extended trip to which they had often looked forward for years have been cancelled, and in general they have made all preparations for an early demise, only to survive for an extended period, and eventually to outlive many of their friends and relatives, and—sometimes—their physicians.

Asthma in the Newborn, or, "Doctor--is it Thymus?"

F. D. NANCE, M.D.
HONOLULU

THE establishment by Dr. Chevalier Jackson of the dictum that "all that wheezes is not asthma" has done the newborn asthmatic a disservice. It has served to lower what was already a low index of suspicion in the medical fraternity until it has nearly reached the vanishing point.

The following seven cases from my records of the past two years are presented to illustrate the following points:

(1) Asthma in the newborn is not uncommon, but is probably the most frequent cause of a wheeze in these infants.

(2) It is almost always dietary in origin.

(3) Since the diet at this age is extremely limited, the detection of the offending food is often a very simple matter.

Case Reports

CASE 1. A. B., female, 8 months old, was brought to my office with the complaint of a constant wheeze since birth. This was severe enough so that she was kept in an oxygen tent for the first four weeks of life. X-rays of the chest were said to show thymic enlargement and she was given deep x-ray treatment with no improvement in the wheeze. Follow-up x-rays were reported as normal. She had been bottle fed since birth on a usual evaporated milk mixture.

Examination showed a well nourished infant of 8 months in moderate respiratory distress. There was a typical expiratory wheeze audible over the entire chest.

A diagnosis of asthma due to milk allergy was made on the basis of history and physical findings. Milk was omitted from the diet; no other treatment was prescribed. Within two days, the wheeze, present since birth, disappeared. After one week a single feeding of milk was given; the wheezing recurred within fifteen minutes and lasted for one day. Subsequently evaporated goat's milk was substituted for evaporated cow's milk, with no recurrence of trouble. Six months later an asthma attack, requiring adrenalin for relief, occurred after a cold. She has been free of symptoms for the past twelve months.

CASE 2. P. S., a white girl, was brought to my office at the age of 3 months with complaint of "wheeze since birth." She had been diagnosed "thymus disease" but no x-rays had been taken or therapy given. Feeding since birth had been Similac. The mother had hay fever.

Examination showed a "wet nose," moderate pallor and an audible expiratory wheeze over entire chest. There was very little dyspnea.

She was put on a formula of evaporated goat's milk, and allerdex and nose drops prescribed. The wheeze disappeared in forty-eight hours and has not recurred in the two months that have passed since that time.

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CASE 3. K. P., a white boy, was brought to my office at the age of 6 months with complaint of "funny noise in chest since birth." He had been bottle fed since birth on a fresh cow's milk formula. He was the second infant in the family; the first had shown similar wheezing breathing for the first 3 months of life.

Examination showed a well nourished boy with moderate cyanosis, and rapid wheezing respiration. Expiratory asthmatic rales were audible over the entire chest.

He was put on whole boiled goat's milk for formula; five days later the wheeze was gone but he was having very loose stools. Skimming the milk failed to control this looseness, so the mother put him back on cow's milk. This controlled the diarrhea, but the wheeze promptly recurred. A trial period of Dryco solved both problems; neither wheeze nor diarrhea has recurred in the past 6 months.

CASE 4. E. L., a Chinese girl, was brought to my office at age of 2 months with complaint of wheezing noise in chest and stopped-up nose since birth. Feeding had been breast milk since birth. She was diagnosed thymus disease in the Maternity Hospital on the basis of x-rays, and given deep x-ray without relief of symptoms. She was taken to a pediatrician, who felt the condition was allergic in nature and gave a series of dust injections without relief. The mother had hay fever.

Examination showed a wet, boggy nose, with secretion loaded with eosinophiles, and asthmatic rales over the entire chest.

On the basis of history a diagnosis of breast milk allergy was made. She was put on an evaporated goat's milk formula. Within twenty-four hours the wheeze stopped; nasal smear was free of eosinophils in one week, although some nasal obstruction persisted for ten days. She has now been symptom-free for two months.

CASE 5. C. H., a Japanese boy, was brought to my office at the age of 10 months with a history of "wheezing since the day he was born." For the past two months there had been constant nasal discharge and obstruction. Feeding had been on evaporated milk since birth. Cereals and vegetables had started at 4 months; egg two months prior to his visit.

Examination showed a pale but well nourished child of 10 months. The nose was full of thick discharge, which showed much pus as well as fairly numerous eosinophiles. The chest showed expiratory asthmatic rales.

A diagnosis of asthma due to milk allergy was made. In view of the increase in symptoms since taking egg, this food was also suspected. Accordingly milk and egg were eliminated from the diet. The wheeze disappeared in twenty-four hours and did not recur when goat's milk was introduced into the diet. The nasal condition was slower to clear, taking three weeks.

In the past year there has been no recurrence of wheezing but he has had more than his share of colds. I fully expect him to have an asthma attack with a cold one of these days.

Case 6. N. C., a Korean boy, was brought to my office with the complaint that he was "born with a cold." He had been bottle-fed on evaporated milk formula since birth, and had had wheezing respiration constantly. Facial eczema occurred when orange juice and cod liver oil were started, so they were stopped. The eczema recurred with all solids that were attempted. He had been to a succession of doctors, two of whom had diagnosed thymus disease. He received deep x-ray treatment without relief of symptoms. In treatment of the eczema dried and fresh cow's milk formulas had been prescribed; none of these relieved the wheezing, although eczema was quiescent as long as he was fed nothing but evaporated milk.

Examination showed a pale, undernourished infant of 6 months with healing eczema, a nasal snort, and asthmatic respiratory rales over the entire chest. Nasal smear showed many eosinophiles.

In spite of the fact that his eczema was quiescent on evaporated milk, a diagnosis of milk allergy was made in view of the wheeze *present since birth.*

He was put on an experimental diet of Nutramigen fortified with ascorbic acid, Drisdol and B complex. The wheeze disappeared in 1 week, and has not recurred in the past 6 months. He has proven a difficult feeding problem, as the only other foods failing to produce eczema thus far have been poi and banana.

Case 7. C. K., a Hawaiian boy, was brought to my office at the age of 7 months with complaint of "funny noisy breathing" since birth. He had been to many different doctors and by one had been diagnosed as "thymus disease" and had been given deep x-ray treatment without relief. Another doctor had diagnosed asthma and given a series of "dust shots" without relief. On the day before I saw him, he was seen by a pediatrician who took an x-ray, found evidence of atelectasis, and advised discontinuance of the cough mixtures he had been taking, but offered no other treatment.

Examination showed a well developed infant in moderate respiratory distress. The chest was full of asthmatic wheezes. A nasal smear was loaded with eosinophils. A check x-ray showed no abnormal shadows in the lung fields.

On the basis of history this seemed clearly a case of asthma almost certainly due to milk allergy. Ephedrine was given for temporary relief, and he was put on an evaporated goat's milk formula.

Within one week the wheeze had disappeared and the nasal smear was free of eosinophils. In the past eleven months he has had no asthma, but has been subject to frequent respiratory infections, and is, I fear, in for trouble in the future.

Comment

Through all these cases runs an almost monotonous refrain: "wheezed since birth—usually bottle fed—usually diagnosed thymus disease—cleared promptly when the offending food was eliminated." I hope I have not given the impression that I think I have cured these cases of asthma. One, in fact, has already had asthma following a cold, and many of the others will, I suspect, develop bacterical and inhalant allergies as they grow older. This much has been accomplished—the diagnosis has been made and the present symptoms have been relieved.

I cannot at this point forbear to make a few remarks about the "Thymus Question." I have long felt that John Lovett Morse's article, "The Thymus Obsession," (*Boston Medical and Surgical Journal*, Feb. 1928) should be required reading for all roentgenologists, obstetricians and pediatricians. In it he points out that there are many recognizable, diagnosable causes of noisy and difficult respiration in infants, and that thymic enlargement is the rarest of all. He also points out that difficulty in respiration due to thymic enlargement is manifest in both inspiration and expiration. He also points out that the shadow of the thymus as shown by x-ray undergoes marked changes during the cycles of the heart beat and respiration. I vividly recall a lecture he gave on this subject which I attended when a medical student. It was illustrated with 10 thymus x-ray pictures which varied all the way from a "small" thymus to a "greatly enlarged" thymus. They were then revealed to be all pictures of the same infant, taken on the same day!

Summary

(1) The history that an infant "wheezed since birth" plus the finding of an *expiratory* wheeze should suggest, at least, a probable diagnosis of asthma due to food allergy.

(2) We should be unwilling to accept a diagnosis of "thymus enlargement" as the cause of noisy respiration in the newborn on the basis of x-ray findings alone, particularly a single x-ray picture.

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The Rh Factor—A Review

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THE Rh factor is an agglutinogen (a substance which may *produce* and may also *react* with its specific agglutinin) found in the red cells of 85 per cent of the total population. Individuals whose red cells contain that factor are known as Rh-positive; those whose cells lack the Rh factor are Rh-negative. The distribution of the Rh factor is not influenced by A and B blood groups or by sex, but it does vary according to race. Very few Rh-negative persons are found among those of Oriental or Oriental-Hawaiian extraction, while almost 15 per cent of Caucasians are Rh-negative.

The Rh agglutinogen is found only in the erythrocytes. The A and B agglutinogens are found in the red cells also but in addition apparently identical substances are found in solution in saliva, stomach juices and other body juices of some persons. In contrast to the A and B agglutinogens, the Rh factor has no natural agglutinins. We all know that by using anti-A and anti-B sera, which agglutinate A and B cells respectively, we can determine blood groups, since these agglutinins normally occur in the serum of individuals, according to their blood group. An Rh-negative individual does not have any anti-Rh agglutinins in his serum under normal conditions, and thus his serum cannot be used to determine his Rh type or the Rh type of another patient's cells.

Like the A and B agglutinogen, the Rh factor is an antigen, that is, it may induce an immunologic response in the individual whose red cells do not contain that factor. As in other antigen-antibody reactions, this process has two stages, namely, (1) sensitization, probably involving the reticulo-endothelial system, and (2) the reactive phase, in which antibodies (agglutinins) appear in the blood stream, where they act upon any Rh-positive cells which may be introduced either by transfusion, across the placenta, or by any other means. This antigenic property of the Rh factor is what makes it so important in clinical medicine.

To the clinician the one important Rh factor is identified by the Standard, or 85 per cent positive, serum. If his patient is Rh-positive by this serum, there is little fear of Rh sensitization and any Rh type of blood may be used; if his patient is Rh-negative with this serum, the patient should always receive *Rh-negative* blood.

The laboratory technician must proceed further than that and make certain that the Rh-negative donor is truly an Rh-negative, and that his blood does not contain any of the subtypes of the Rh factor which may not react with the Standard anti-Rh serum. The physician may rest assured that when he orders Rh-negative blood from the Blood Bank for his negative patient, he will receive true Rh-negative blood. The main thing to remember or to consider is only whether the patient is Rh-positive or Rh-negative, and let it go at that. In reporting Rh types of donors, the Blood Bank occasionally may report a donor as "Rh-negative, rh″." The physician should disregard the "rh″ " and consider this person simply as an Rh-negative patient.

Rh-Sensitization

All Rh-negative patients who receive Rh-positive blood will by no means become sensitized and develop antibodies. Probably not more than one out of twenty-five patients who are Rh-negative, will develop antibodies in the serum following exposure to Rh-positive blood. This naturally reduces the incidence of erythroblastosis, and reactions to blood transfusions, markedly; but no one can foretell who the one in twenty-five will be, so that it is necessary to use Rh-negative blood for Rh-negative patients to be certain that there will be no chance of immunization. This applies to patients of either sex and of any age.

The first transfusion of Rh-positive blood to a negative patient, or the first Rh-positive child borne by an Rh-negative mother, rarely causes sensitization; and if sensitization does occur, the reactive stage may not become apparent for months. Should a patient become sensitized, he keeps that property, and later should he again receive Rh-positive blood,—or, in the case of an Rh-negative mother, bear another Rh-positive child—the reactive state will supervene with the rapid formation of antibodies and disaster in the form of hemolytic reactions in the one case, and an erythroblastotic infant in the other.

Rh Antibodies

The duty of the laboratory is to determine whether the individual is Rh-positive or Rh-negative, and, if a negative patient has a reaction, or a negative mother has an erythroblastotic baby, whether there are antibodies in the patient's serum. Referring to the A, B and O system, we remember that there are naturally occurring anti-A and anti-B agglutinins in blood serum. We determine groups by the interaction of these

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From the Blood Bank of Hawaii.

factors which are demonstrated by agglutination of A cells by anti-A agglutinins, B cells by anti-B agglutinins and O cells by neither. There are *two* kinds of Rh antibodies, in contrast to the above. There are the agglutinins, which give the same reaction of agglutination with Rh-positive cells as do the Anti-A and Anti-B sera with A and B cells. In addition there are the "blocking" antibodies. Both can be demonstrated in test tubes by the laboratory technician.

The theory of agglutination, simply stated, is that if a saline suspension of *red cells containing an agglutinogen* is mixed with a *serum containing the agglutinin* with which it reacts, the agglutinin, theoretically having 2 combining sites, will attach itself to at least two red cells and cause *clumping*. This occurs in the A, B, O system, the Rh system, the M, N system and all the other cases in which there exist agglutinogens and agglutinins.

Blocking Antibodies

In the test tube, under the same conditions as obtain above, the "blocking antibody" acts differently in that by itself it does not cause agglutination or clumping. The "blocking antibody" according to the theory proposed by Wiener, is an incomplete or partial immune body, in that it has but one combining site. Thus, when Rh-positive red cells, suspended in saline, are mixed with a serum containing either "blocking antibodies" alone, or a combination of both agglutinins and "blockers," the "blockers" will attach themselves by their one combining site to the red cells, preventing the action of the agglutinins. On the other hand, when Rh-positive erythrocytes are suspended in normal human serum, then mixed with sera containing "blockers" alone, or both "blockers" and agglutinins together, clumping will occur, the theoretical explanation being that serum contains a component, called X-protein which either causes or allows the "coated" red cells to stick together, and clump.

1. Rh-positive erythrocytes in saline plus Rh agglutinins equals: agglutination;
2. Rh-positive erythrocytes in saline plus blocking antibodies equals: coating of red cells but no agglutination;
3. Rh-positive erythrocytes in saline plus blocking antibodies plus agglutinins equals: coating of red cells but still no agglutination;
4. Rh-positive erythrocytes *in serum* plus blockers, with or without agglutinins equals: clumping.

In testing for the presence of antibodies in a presumably sensitized patient's serum, the following tests are carried out. The first test is the agglutination test, which is performed by mixing one drop of the patient's serum with a drop of a 2 per cent suspension *in saline* of known Rh-positive red cells. This test is carried out in varying dilutions of the patient's serum, so as to be quantitative as well as qualitative. The mixture is incubated in a water bath at 37° C. for one hour, and the results read after 2 minutes centrifugation at 1000 R.P.M. In a positive reaction the red cells are clumped together in a fairly firm mass which can easily be seen with the naked eye, and better still under the low power of the microscope. The mixture should not be shaken too vigorously, since the clumps can rather easily be broken up. In a negative reaction the red cells remain separate, in a homogeneous suspension. This test, if agglutination occurs, reveals the presence of agglutinating antibodies; but if no agglutination occurs, it may mean *either* that there are "blocking" antibodies, *or* that there are no antibodies at all. If "blocking" antibodies are present, as stated above, they will have "coated" the red cells and prevented the action of agglutinins. To demonstrate this, the blocking test is carried out by adding strong anti-Rh serum to the unagglutinated mixture and further incubation carried out. At the end of an hour and a little centrifugation, the results are read again. If there be *agglutination* we know that there are no antibodies present; if there be *weak agglutination* (in comparison to a control) we know that there is a low titer of "blocking" antibodies present; and if there be *no agglutination*, then definitely we know that strong "blockers" are present.

In Wiener's Conglutination Test, serum is substituted for the saline. For this test all cell suspensions and dilutions are made *in normal human serum* which contains this third component, the X-protein. This component will stand heat without breaking up, but even a little aqueous dilution will cause it to divide into its component parts of albumins, globulins and phospholipids.

To a drop of the various dilutions of the patient's serum is added a drop of 2 per cent suspension of known Rh-positive cells *in serum* and the mixture incubated at 37° C. for one hour, centrifuged briefly and read as before. Clumping will occur when "blockers" alone are present, and also if agglutinins only, or if there be a mixture of "blockers" *and* agglutinins.

Secondary Tests

Other tests can be carried out to demonstrate the presence of Rh antibodies. One of these important secondary tests is the Diamond test. This is a rapid test in which oxalated red cells are used. A heavy suspension is necessary, at least a 50 per cent suspension being used. To the Rh-positive oxalated red cells on a slide is added a drop of the serum in question. The slide is then shaken in a circular motion over a source of heat, at about

body temperature, for a few minutes. Should either agglutinating *or* "blocking" antibodies be present, clumping will occur. This test is really a slide conglutination test.

Coombs, in England, and Hill, in this country, use another test for the detection of the "blocking" antibody. Their method is based on the well recognized fact that antibodies, in general, are formed in the globulin fraction of the plasma. Therefore, if the red cell has been exposed to the action of any antibody—in this case, the "blocking" antibody—its surface will be coated with these globulin antibodies. If these red cells are thoroughly washed in many changes of saline, all excess serum is removed except the globulin antibodies adherent to the red cell surface. Coombs developed a rabbit anti-human-globulin serum with which these sensitized red cells can be tested. If globulin-antibodies are attached to the red cells the anti-globulin serum causes the clumping of the red cells. We have not had much chance to use the Coomb's test since we only received the anti-human-globulin serum recently. A short time ago the Blood Bank received blood samples from both a mother and a jaundiced child. The child's cells were washed thoroughly with saline and tested with the serum. This gave a marked positive reaction and a diagnosis of erythroblastosis fetalis was made. Confirmation of this finding was obtained when the mother's serum showed a high titer of both agglutinating and conglutinating antibodies.

Both of these last two tests are only confirmatory, and we do not use them routinely.

A few illustrative cases will now be presented to show that the Rh factor is of importance in the male as well as in the female patient:

Case Reports

Case 1. A 60-year old man was in the hospital for treatment of a cardiac disease, complicated by a severe secondary anemia. He received five transfusions from random donors over a period of one month. In each case the blood was compatible by the usual agglutination cross-match. The first transfusion resulted in a mild pyrogenic type of reaction, but thereafter each transfusion gave progressively more marked reactions. Eventually the patient was Rh typed and found to be Rh-negative. In reviewing the patient's history it was discovered that the patient had received two transfusions some months before this present entry. The patient's serum was tested at the Blood Bank with the following results: the anti-Rh agglutinin titer was 1:64, the conglutinin titer 1:1024. This patient eventually received 14 transfusions of Rh negative blood without reactions. One month later the patient's serum showed agglutinins present in a titer of 1:32, and conglutinins in a titer of 1:128.

Case 2. A 29-year old secundigravida, the first pregnancy occurring eight years previously, delivered a viable infant, who on the second day of life became jaundiced. Examination of the blood showed a hemoglobin concentration of 70 per cent and a red cell count of 2.87 million, with many nucleated red cells. A diagnosis of erythroblastosis fetalis was made on the infant. The father and the child were both typed as Rh-positive, while the mother proved to be Rh-negative. Twenty days postpartum the mother's serum showed blocking antibodies to be present, and the conglutinin titer was 1:256. Six months later the mother's serum still had conglutinins present in a titer of 1:16.

Case 3. A 26-year old Japanese female had had 3 previous pregnancies with deliveries of viable and now living children. The first and second infants, she stated, had had slight jaundice for which nothing was done, and from which they recovered without incident. The third child apparently had no visible jaundice. The present infant became jaundiced and anemic two days after birth. He was given Rh-negative blood and recovered. The entire family was typed; the father was B Rh-positive, the mother A Rh-negative, but positive to subtype rh″. All four of the children gave positive tests with the standard Anti-Rh serum. The mother's serum contained agglutinins in a titer of 1:40, and conglutinins in a titer of 1:128. The jaundice which occurred in the first two children was probably not due to erythroblastosis, since sensitivity to the Rh antigen is not lost. This case illustrates the fact that although the mother was Rh sub-type positive, in other words, Rh_o negative but rh″ positive, she still became sensitized.

Case 4. An infant was stillborn, of an Rh-negative mother and an Rh-positive father, but no antibodies were found in the mother's serum. This was proven when the post-mortem examination ascertained that cause of death was not erythroblastosis.

Summary

The questions are often asked: "What if my patient is Rh-negative?" "What if my patient is sensitized?" The answer to the first inquiry is simple enough, it seems. If the patient is Rh-negative, remember it, and in case he or she should ever need a transfusion, give Rh-negative blood. If no attention is paid to the question of the Rh factor a certain percentage of these patients will become sensitized and preventable transfusion reactions will occur. Any intragroup transfusion reaction which occurs in an Rh-negative individual demonstrates that someone was not quite as careful as he should have been. This is the case in Rh-negative females at any age, especially in childhood, when they may become sensitized by transfusions of Rh-positive blood and thus possibly be condemned to bear erythroblastotic infants.

Concerning the second question: if a patient is sensitized, nothing can be done for that state, but trouble can be averted in case of transfusion by making absolutely certain that only Rh-negative blood be used. The alert physician will adhere to the rule that only Rh-negative blood be used for Rh-negative patients, and thus prevent a good deal of difficulty both for himself and for his patient.

Every Rh-negative person is a potential casualty incident to the use of Rh-positive blood.

Echinococcus Cyst of the Lung

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HYDATID disease—echinococcus infestation—has been discussed since ancient times. Hippocrates was among the first to mention it, and it was he who described "livers filled with water." The exact nature of the disease was not determined until 1826, when its parasitic nature was made known. Much of the work on this disease has been done in Italy, evidently because of the frequency with which it is found there. In the past fifty years the volume of work on the subject has increased greatly in Argentina and Australia, as shown by the number of articles published on the subject. The paucity of literature on echinococcosis in the United States is remarkable. Since 1930 there have been less than twenty-five papers written on the subject and recorded in the *Quarterly Cumulative Index Medicus*. In 1930, Phillips, of the University of Rochester Medical School, writing in the *Archives of Surgery*, presented two cases of hydatid disease of the lung and collected 32 previously reported cases to bring the total to 34 cases published in the United States up to that time.[1] Incidentally, one of the 32 cases collected was that of Bernays, in St. Louis, who reported[2] that surgery was done on an individual from Honolulu with the removal of a cyst of this type from the lung. In 1940, Haight and Alexander[3] reported two cases of their own and collected 8 previously published cases, making a total of 44 cases reported to that time. These are the last mentioned in the United States up to 1945.

Epidemiology

In studying these cases, it is interesting to note that by far the greatest number of individuals were born in the Mediterranean Basin and migrated to the United States. Only five are known to have been born in the United States, and of these only one lived there all her life. The others had spent varying periods of time in Europe and the Philippines.

In the United States the presence of Taenia echinococcus has been noted: it has been reported in the stools of hogs in the southern part of the United States, particularly in Virginia, Oklahoma, and New Mexico. The only case known, however, in which there had been no possibility of contracting the disease outside of the United States, was found in Virginia. This patient was a negress who had spent her entire life in Virginia. Phillips,[1] in an extensive review of the subject, believes there is a rapid and serious increase in the incidence of echinococcus infestation in animals and human beings and that serious thought should be devoted to its future control. This problem is more important now following the war with the return of servicemen from the theaters in which they are and have been fighting, since most of these areas, particularly Iceland, Australia, Italy, North Africa, and France, are infested with this parasite.

The dog and the wolf are the ideal definitive hosts. They scatter the ova of the parasites, which are then picked up by sheep and by human beings. In the case of the human, the ova are conducted to the mouth by the hands from the fur of the dog, or in the drinking water, or in the eating of food contaminated with the parasite. The capsule of the ovum is dissolved in the stomach, and the ovum itself passes through the intestinal wall into the portal circulation. It may then be transported anywhere in the body.

Pathogenesis

Dew reports that within a short time after the ovum is deposited in an organ of the body, it is surrounded by mononuclear cells and later by eosinophiles and endothelial cells. Within three weeks vesiculation occurs and fluid is formed. Further slow growth of the cyst continues. The outer wall of the cyst, called the adventitia, is formed by the organ in which the cyst lies. In the lung the wall is thin, while in more dense organs it is thick and heavy. The endocyst and the ectocyst form the other layers of the wall by fine filaments which float freely in the fluid of the cyst. Within these capsules, the scolices or heads of the future worms develop. The head has as appendages the hooklets and suckers, and from this head other parasites grow.

Godfrey[4] reports that the cyst fluid has a specific gravity of 1.000 to 1.015. It has been reported

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[1] Phillips, E. W.: Hydatid cysts of lung; review of recorded North American cases. Arch. Surg. 21:1324-1378 (Dec.) pt. 2, 1930.

[2] Bernays, A. C.: Case report, #42. Am. J. Med. Sc. 84:477 (Oct.) 1882.

[3] Haight, C., and Alexander, J.: Hydatid cysts of lung. Arch. Int. Med. 65:510-523 (March) 1940.

[4] Godfrey, M. F.: Hydatid disease; clinical, laboratory and roentgenographic observations. Arch. Int. Med. 60:783-804 (Nov.) 1937; correction 61:160 (Jan.) 1938.

by many as resembling clear "limpid spring water or spinal fluid." In the case of secondary infection, pus is formed, which is thick, foul-smelling, and foul-tasting. There may be tissue in the fluid which resembles grape skins. These are the capsules which have ruptured.

The organ most often affected by the disease is the liver, with most of the observers finding the liver involved in 75 to 95 per cent of the cases reported. The lungs and pleura are involved next in frequency, or in about 5 to 18 per cent of the cases; other organs found involved, in diminishing order of frequency, are the kidney, spleen, bone, brain, heart, and muscle.

The mode of infection in the lung has not been definitely ascertained. The possibility of spread of the cyst upward into that organ from the liver has been advanced since the majority of the lung cases are found to have involvement of the lower lobe of the right lung. There are, however, enough cysts located in other portions of both lungs to make it seem probable that the disease is blood-borne from the intestinal tract with the scolices lodging in the lung.

Complications

As the cyst grows the amount of fluid increases; without treatment, the outcome may be rupture of the cyst into the pleural space which may or may not result fatally. In many of the reported cases, this occurred with an accompanying acute reaction followed by chronic infection of the pleura and lung cavity. This appears to be a frequent occurrence, and often this is the first knowledge of the presence of the disease. A few of the authors mention the transplantation of daughter cysts at this time, not as discrete cysts but as a part of massive abscess in the pleura.

Another outcome is that of rupture of the cyst into a bronchus with resultant sudden gush of whitish fluid containing particles resembling grape skins. Following this, a chronically infected lung cavity may result, with the necessity of further treatment. Many cases are first diagnosed in this stage or later, during the period of low-grade lung infection, and with the expectoration of the grape-skin-like tissue. Lepicard[5] and Bellard[6] report that about 85 per cent of the cases of the cyst rupturing into the bronchus may require no further treatment.

Most authors do not recommend aspiration of the fluid from a lung cyst due to hydatid disease. The late P. N. Coryllos[7] stated that it is a dangerous procedure, due to the risk of spilling the irritating cyst contents into the thoracic cavity, with a resultant anaphylactoid reaction terminating fatally or at least resulting in empyema. A few authors report needling of the cyst without unfortunate outcome.

Dew[8] reports that the anaphylactoid reactions appear symptomatically as pruritus, urticaria, erythema, sweating, tenesmus, diarrhea, tightness in the chest, asthma, spasmodic cough, dyspnea, cyanosis, pulmonary edema, edema of the glottis, pallor, faintness, tachycardia, agitation, convulsions, or coma. It appears that the acute reaction following rupture of a cyst into the pleural cavity is primarily due to the accompanying anaphylactoid reaction.

Diagnosis

Aid in the diagnosis of this condition is obtained from the use of the precipitin test and the skin test. The precipitin test is made with fluid from the cyst as an antigen, and serum from the patient.

The skin test is an intradermal test, using the fluid of the hydatid cyst for injection into the skin as the Mantoux test in tuberculosis is performed, or in doing a scratch test similar to the von Pirquet test.

There is a marked discrepancy of opinion as to the value of these tests. The precipitin test is reported as being nonspecific since other types of parasites cause the same reaction. In some cases of tuberculosis, a positive reaction has been obtained. Apparently the precipitin test is an adjunct to diagnosis but is not diagnostic.

The skin test is more accurate. This, too, is nonspecific, since other parasites likewise may give a positive reaction, but a higher percentage of verified positives has been reported with its use. The test must be done with proper care as the antigen is known to deteriorate rapidly with a resultant negative test. Many mixtures using glycerine, saline, and other constituents have been used. According to Phillips, the simplest and most successful appears to be the use of undiluted fluid of the cyst.

Clinical Course

There are usually no constitutional symptoms as long as the cyst remains intact. Cough is present in most cases, and this symptom becomes aggravated with the increase in size of the tumor. The most frequent and important symptom is hemoptysis. Blood spitting may occur in small amounts or may occur as a profuse flow; it may

[5] Lepicard, S.: La vomique pulmonaire. Thèse de Paris, #290, 1912.

[6] Bellard, L.: Contribution à l'étude de la vomique, hydatique curative. Thèse de Paris, #105, 1924.

[7] Coryllos, P. N.; Discussion of article by E. W. Phillips.[1]

[8] Dew, H. R.: Hydatid disease: its pathology, diagnosis, and treatment. Sydney, Australasian Med. Pub. Co., Ltd. p. 43, 1928.

occur frequently or infrequently. Pain in the chest may or may not be present. Symptoms occurring as the result of pressure on a large blood vessel or other structures are uncommon. Following rupture of the cyst into the pleural cavity or into the bronchus, other symptoms may occur. If the cyst ruptures into the pleura, all the symptoms of acute empyema are present. If it ruptures into a bronchus, chronic fever with cough and other symptoms of lung abscess may be present.

Roentgenologically a single or multiple spherical or ovoid mass, appearing more often in the right lower lobes of the lung and less often in other parts of the lungs, should lead one to suspect a hydatid cyst. This is particularly true if the ribs show through the shadow, indicating a comparatively easy penetration of the material in the cyst, and if the wall is very thin with an even outline. A calcified wall need not be present. A Bucky film of the chest also will help to rule out a dermoid cyst or teratoma.

Treatment

The treatment of choice is surgery, with extirpation of the cyst wall. Following surgery, the problem arises concerning the closure of the space previously occupied by the cyst. Thoracoplasty, phrenic surgery, and artificial pneumothorax have been used, with pneumothorax frequently reported in use in South America. Also mentioned in the literature in connection with the treatment of the cysts are: x-ray therapy, the injection of sclerosing agents, antigen desensitization, serum obtained after the inoculation of horses with the antigen, and bed rest.

Prognosis

The death rate is fairly high. In the year 1917, 14 per cent of the deaths recorded in Iceland were due to hydatid disease. Godfrey[4] reports that in Australia the number of deaths has decreased gradually as the condition has become more familiar and with the advent of the skin test, the precipitin test, and the improvement of x-ray technique. The latter appears to be the most important factor.

Case Report

The patient, an Italian, was admitted to the hospital on August 28, 1944, with the complaint of pain in the chest, of one year's duration, and spitting of blood, of two months' duration. The pain in the chest was dull in character, made worse by exertion and on deep breathing. It was present in the shoulder and lower axillary portion of the right chest. Hemoptysis occurred with cough and was present in small amounts, averaging about a teaspoonful, for periods of three to four days at a time. He had at other times a slight nonproductive cough. On admission, he stated he had lost about 8 pounds in weight over a period of six months.

The patient had lived in Italian Libya, Northwest Africa, in Algiers and Casablanca, and in Arizona in the United States, before coming to Hawaii. In North Africa he had often slept on the ground. He had served in the Italian Army for a period of two years. He was born on a farm in Enna, Sicily, and had spent the early part of his life there. On this farm he had many dogs which he petted and of which he was very fond. There were no sheep on the farm, but there were some in the mountains near his home.

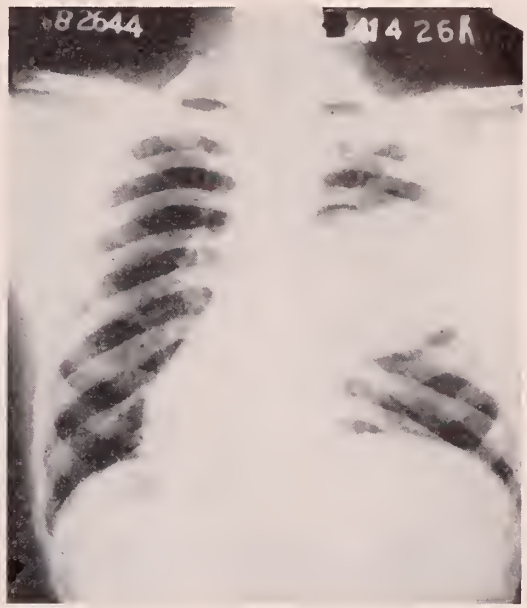


Fig. 1.—Anteroposterior view of the cyst.

At the time of his admission to the hospital, the abnormal physical findings were confined to the chest. The patient was spitting blood; he was normally nourished, and walked into the ward. There was slight protuberance of the anterior aspect of the right upper chest wall just below the proximal third of the right clavicle. There was no other deformity; there was no limitation of motion. There was dulness to percussion over the anterior portion of the right side of the chest from the region of the third rib to the sixth, extending laterally to the anterior axillary line. On auscultation there were no breath sounds heard over the area of dulness; there was a whistling sound concurrent with cough in the region of the sixth rib parasternally extending downward and laterally to the anterior axillary line. A few rales were heard in the anterior axillary line in the region of the third, fourth, and sixth ribs. These were dry rales which did not persist following cough. The mediastinum was not displaced, as well as could be ascertained, and the remainder of the chest was normal. Blood pressure in both arms was 140/80.

The laboratory work-up revealed a sedimentation rate of 45 mm. in one hour. The red blood cell count was normal; the white cells numbered 12,000 with 87 per cent polymorphonuclear leukocytes, and 3 per cent eosinophiles. The sputum tests were negative for acid-fast organisms.

X-ray of the chest revealed a tumor in the right midlung area, spherical in shape, measuring about 10 cm. in diameter. The tumor was sharply outlined from the surrounding structures. Lateral and oblique views showed it to be located anteriorly; a Bucky film of the chest did not reveal any foreign bodies in the tumor. Fluoroscopy of the chest revealed no pulsation in the tumor.

Over a period of seven days his temperature was elevated to 99° F. daily at irregular intervals; the pulse averaged 90 per minute. The hemoptysis, mentioned as present on admission, disappeared soon after rest was instituted.



Fig. 2.—Lateral view of the cyst.

On September 11, 1944, the tumor was needled for a specimen for examination. Upon introducing the needle into the tumor, the fluid of the cyst was forced up into the barrel of the syringe by the positive pressure inside the tumor. The fluid was clear and the color of spinal fluid. About 50 cc. of fluid were withdrawn with no untoward reaction. There was no evidence of anaphylactoid reaction of any type.

The evening following aspiration of the tumor, his temperature rose to 101° F. and his pulse rate to 120, with a slow return to normal levels within two days. An x-ray of the chest three days after aspiration revealed a small amount of air in the top of the tumor and a small amount of fluid in the right costophrenic sinus with a 20 per cent collapse of the right lung by air. Six days after aspiration, this collapse had decreased moderately; the fluid appeared to have increased but this was the result of partial re-expansion of the lung. From the sixth day following aspiration, the patient appeared normal except for loss of appetite and some malaise. Exactly ten days later he complained of pain in the wrist joints, the phalangeal joints, and the metacarpophalangeal joints. There also was marked asymptomatic conjunctival infection and hyperemia. There was no associated rise in temperature or pulse rate. These symptoms subsided in three days and were interpreted as being a delayed allergic reaction comparable to serum sickness.

The laboratory examination of the fluid revealed no scolices or hooklets. The fluid was clear and whitish in color; no organisms were found; total protein was 11.5 mg. per 100 cc., and the specific gravity was 1.000.

An intradermal skin test was done using 0.1 cc. of a known specimen of hydatid fluid obtained from another source and also fluid from the cyst itself. These tests were performed on the anterior aspect of the forearm of the patient, and there was no reaction whatsoever to either solution.

To further test the specificity of both the protein from the laboratory and the fluid from the cyst, skin tests were placed on the forearms of ten other individuals who were native-born Americans, coming from various parts of the United States. Two of these patients were found to react to both solutions; two reacted to the laboratory solution only; and one reacted only to the solution from the cyst of this patient. The reaction consisted of a white, raised area with pseudopodia and an erythematous halo about 2 cm. in width. These patients had no evidence of hydatid disease and were hospitalized for other conditions. This would seem to indicate that the protein skin test is nonspecific.

Twenty-one days following aspiration of the cyst, a low-grade elevation in temperature made its appearance. This was noticed particularly in the evening and was associated with a complaint of pain in the right lower chest and in the right shoulder. X-rays of the chest showed a slowly increasing quantity of fluid. Upon aspiration, this fluid was found to be cloudy yellow, containing 2,500 cells per cc., 30 per cent polymorphonuclear leukocytes, 50 per cent lymphocytes, 10 per cent monocytes, and 15 per cent eosinophiles. Specific gravity was 1.020, and the total protein was 2,856 mg. per 100 cc. No hooklets were seen. The blood count at this time showed 14 per cent eosinophiles. This latter finding was particularly significant, for this was the first time that the eosinophiles were found to be above normal level in the blood. The sedimentation rate was 74 mm. in one hour.

About six weeks following aspiration of the cyst, the patient, during a spell of coughing, suddenly spit up a large quantity of thick, yellow sputum and complained of pain in his chest. He then began having difficulty in breathing, which soon subsided. His temperature rose to 104° F., with an increase in the pulse rate and respiration. The following day, x-ray of the chest revealed a pneumothorax, with all the fluid evacuated from the cyst. A reading at this time showed high intrathoracic positive pressure. On removal of 250 cc. of air, the patient became more comfortable. Three subsequent times decompression was carried out, and on one occasion 150 cc. of cloudy, brown fluid were removed. Examination of this fluid revealed 3,800 white cells, 95 per cent polymorphonuclear leukocytes, and 5 per cent eosinophiles. The specific gravity was 1.024, and protein continued at a high level. In this fluid the hooklets of echinococcus were found. After a period of four days, the cyst seemed to close. Eight days following rupture of the cyst, his temperature returned to normal with only an occasional evening temperature of 99° F., pulse rate of 88, and respirations of 24.

The "accident" recorded here represents the formation of a bronchopleural fistula with ball-valve action. Some of the fluid was evacuated through the bronchus, and was found similar to that removed on needling the

cyst. At no time were the "grape-skin" specimens found. The fluid from the pleura was that of an empyema from organisms other than pus-forming organisms. There was no evidence of toxemia at any time except for the elevation of the temperature and the pulse rate. All other symptoms were the result of mechanical effects of the broncho-pleural fistula.

Comment

This case is presented as one of hydatid cyst of the lung. The fluid was typical of the condition, and the complications were those which frequently may occur. The history of the patient's early life on a farm in Italy, where he was associated with dogs as pets over a comparatively long period of time, pointed to this diagnosis. The absence of anaphylactoid reaction after the contents of the cyst were spilled into the pleural cavity emphasizes the fact that sensitivity to the protein of Taenia echinococcus either is evanescent, or may vary in the individual. This fact, together with the results of the skin test, bears out the previous statement that the skin test is not a specific one and therefore should not be so interpreted. Because of lack of materials in the laboratory, the precipitin test was not done.

It is interesting that the hooklets could not be found in the fluid aspirated from the cyst, but were found only in the fluid from the pleural cavity. This is explained by the fact that normally the hooklets are attached to the wall of the cyst and have no tendency to float free in the cyst fluid, but on rupture of the cyst the hooklets were loosened and transplanted into the pleural cavity. The absence of eosinophiles in the blood stream during the early phases of the cyst, with their appearance soon after rupture of the cyst, suggests that an eosinophilia may be used only as a diagnostic point after the cyst has ruptured, or after some communication has been established between the contents of the cyst and the outside of the cyst wall.

1133 Punchbowl St.

Hearing Defects in the Schools

H. E. CRAWFORD, M. D.
HILO, HAWAII

A PROGRAM for the detection of hearing defects has recently been instituted in the schools of the island of Hawaii. The Board of Education has employed a trained person to do mass testing of hearing of the children. The first test covers a number of individuals who record their impressions on a score card. The cards are graded and those who fail are tested individually on a standard audiometer. If there is a significant defect, they are then referred to their family physician who may or may not refer them to a specialist. It has been my experience that the work of the person who is carrying out this survey is accurate and her audiometric readings are dependable. This is the first island on which such a program has been started, but it will be carried out on Oahu in the near future. The follow-up on these cases is taken care of through the Board of Health Nursing Service.

Such a program merits discussion from many angles. About a year ago the Hawaii County Medical Society was informed that the work was being instituted, and it was decided at that time that the individuals referred should be seen by their family physician before being referred to a specialist. This policy is good; but in order that the best results be obtained, it is necessary that we establish some uniformity of understanding as to what procedure is to be carried out in each individual case.

At this point it may be worthwhile to review briefly the cases I have seen and to try to classify them and indicate in a general way the treatment carried out. It is not always possible to make a definite diagnosis in a given case, the differential diagnosis between tubotympanic catarrh, catarrhal deafness, and otosclerosis being sometimes impossible in a young individual.

To date, 51 cases have been examined. The majority fall in the class of tubotympanic catarrh secondary to hypertrophied tonsils and adenoids, subacute or chronic sinusitis, or vasomotor rhinitis. There were 26 cases in this group. These have no perforation of the drum and, of course, no discharge from the ear. The deafness is due to improper function of the Eustachian tube without evidence of fibrosis of the middle ear. It is sometimes difficult to draw the line between this group and the next one, chronic catarrhal otitis media, in which there are permanent fibrous changes in the tympanum with fixation of the drum in a retracted state. There were 7 cases in the latter group. Presumably those in the former are reversible. The deafness can be improved or eliminated by proper treatment, removal of adenoid tissue, attention to the sinus disease or vasomotor rhinitis plus inflation of the middle ear by either the Valsalva method or through a Eustachian catheter. The group with lymphoid hyperplasia has recently come into prominence because of the work of Crowe in Baltimore, who has shown that most of them, if they do not respond to tonsillectomy and adenoidectomy, clear up with irradiation of the mouth of the Eustachian tube either with radium (in a special applicator) or with x-ray therapy. The dosages are small, as lymphoid tissue is very sensitive to irradiation. It is obviously impossible to remove all adenoid tissue by adenoidectomy, some of it extending along the wall of the tube where it can be reached only by irradiation, so the rationale of this form of therapy is logical. So far we have not carried it out here, but expect to in the near future. It is probable that the results have been over-rated as many of these cases clear up spontaneously. At present I believe it should be tried in those who do not respond to standard measures in a reasonable length of time.

Chronic catarrhal otitis media with fibrosis is very difficult to treat. Inflation of the middle ear occasionally produces spectacular results but for the most part these patients can only be helped by a hearing aid, if their deafness is severe enough to require one.

We have seen 8 cases which were diagnosed otosclerosis on the basis of normal drums, normal nasopharyngeal findings, and in some instances a history of the disease in the family. All had mild to moderate deafness which could not be otherwise classified. Only time will tell whether all of them have otosclerosis or not.

Only 2 cases of toxic or nerve deafness were seen, both unilateral and severe. One patient had had epidemic parotiditis. In other cases we have seen practically total deafness which has come on secondary to this disease.

I have purposely left to the last chronic purulent otitis media with chronic mastoiditis. We have only seen 6 of these, though they were ex-

This paper was read at the monthly meeting of the Hawaii County Medical Society on Thursday evening, February 6, 1947.

pected to be the most numerous. In the future their numbers should diminish even further, because the use of penicillin in acute otitis media is practically a specific remedy, and few should develop a chronic discharge; practically none, indeed, if they are properly treated. However, there will always be neglected cases. Penicillin is of very little value when chronicity has been established because there is a mixed infection of low virulence with bone destruction and poor drainage. Penicillin has made the surgical treatment of these cases very safe. We now believe that every case of chronic purulent otitis media that has persisted constantly for more than three months should have a mastoidectomy performed. There are several dangers in allowing these cases to persist. The hearing will certainly be progressively impaired. There is always the risk of serious complications, particularly brain abscess and meningitis. Finally, many of these children have an offensive discharge which impairs their normal association with others.

In most of these cases radical mastoidectomy will be necessary and should be done if the disease has been present for a considerable length of time and there is a hearing loss of about twenty-five per cent. Some will respond to a simple or a modified radical operation but, as a general rule, it will be disappointing and a second operation has to be carried out. It is not generally realized that radical mastoidectomy frequently improves hearing, and it does not deteriorate further as it does when the otitis media is allowed to go unchecked.

Cases having bilateral severe hearing impairment require hearing aids. There are several makes that are excellent. However, the proper fitting and servicing of these is of the greatest importance and is highly technical work. There are cases with an even hearing loss for all tones which can be benefited, if they are not too severe, by the cheaper aids, but when selective amplification is required, a more expensive instrument is essential and it must be properly fitted. It is difficult enough to get patients to wear any hearing aids because of their cosmetic appearance, and if they are not properly fitted, and the patients are not educated to their use, the individuals think their money has been wasted. We have been prescribing one make, not because it is necessarily superior to other comparable makes, but because the company putting it out has a technician who visits Hilo for three days every month and he has been both competent and honest in his dealings with patients. At the present time the Hawaii Eye, Ear, Nose, and Throat Society is trying to have a hearing aid center established in Honolulu where patients can try various types of instruments. If the proper administrator is found, this should be of considerable value to patients and physicians.

Any discussion of hearing defects should include the fenestration operation for otosclerosis popularized by Lempert of New York. The final word has not been said regarding the value of this procedure. It is of no value in any other type of deafness, but in otosclerosis it is certainly of value in a large proportion of cases. Lempert claims about eighty per cent. There are not many men who are qualified technically to do this operation. It is an extremely delicate one and at present is necessarily expensive. It is probably out of the reach of most of our patients here.

Finally, something should be said about rehabilitation of those patients who are handicapped from a vocational standpoint when they leave school. There has recently been set up, under the Department of Public Instruction, an office of Vocational Rehabilitation supported by Federal funds to do whatever is necessary to fit any handicapped person for any occupation he may choose.

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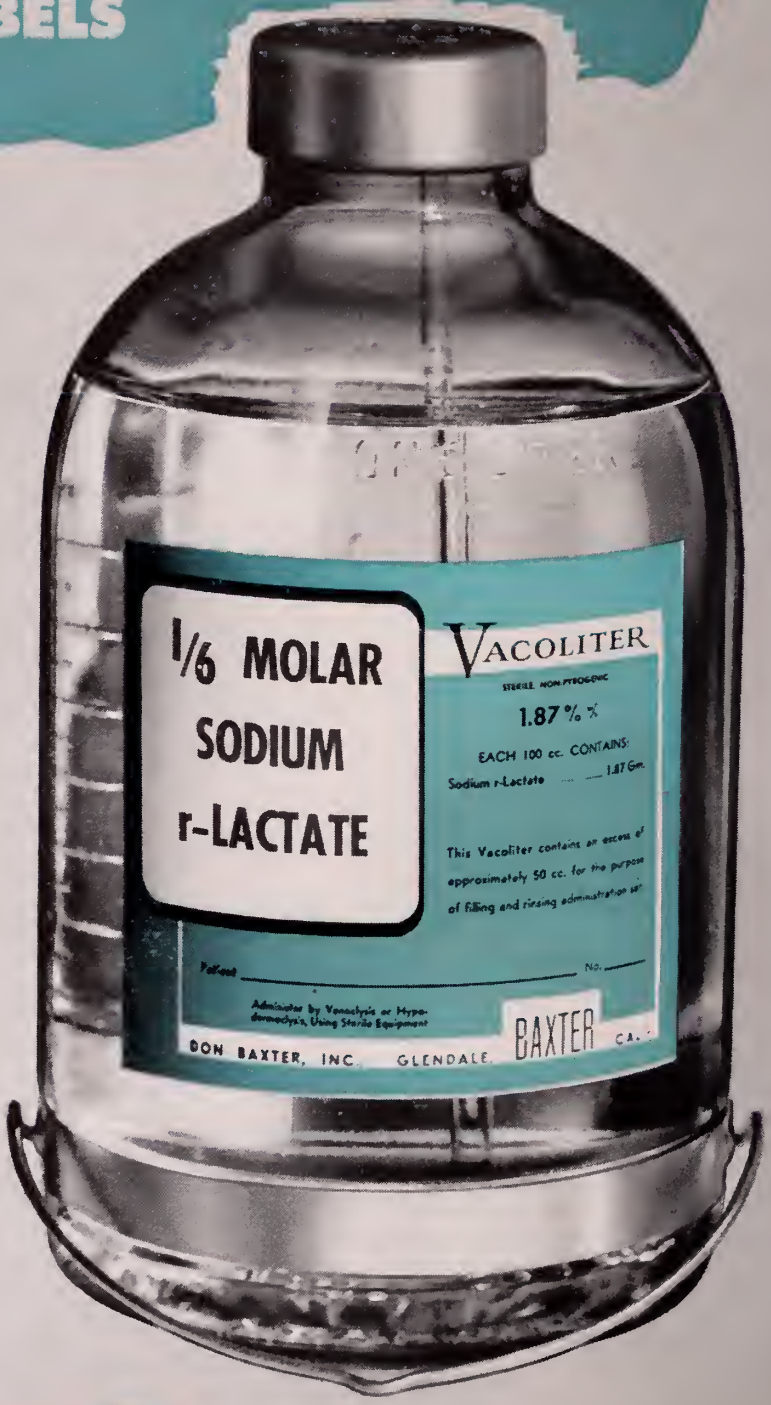
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[EDITORIALS]

DOCTORS VS. COMPULSORY SICKNESS TAXATION

Doctors are primarily interested in the best medical care for the largest number of people at the most reasonable practicable cost.

This is a fact that is apt to be forgotten, or overlooked, in the discussion of such subjects as the one we are met to discuss tonight. But it *is* a *fact*. It is attested to by ample evidence. What other group of business or professional men, having a product to sell, spend time, and effort, and even money, trying to help people to need less of that product, or even to get along without it entirely? Yet that is what doctors do, when they teach and preach preventive medicine. What other group of business or professional men, having a customer come in to purchase some of their product, make a serious effort to help that customer not have to return for a second supply? Yet that is what doctors do in office practice, when they try to cure a patient. What other group of business or professional men, having discovered or devised a new and useful "trick of the trade," hasten to tell all their competitors all about it so they can use it too? Yet that is what doctors do, when they publish papers in medical journals.

Why do they do this? Why this seemingly selfless generosity? Well, they do it partly because they derive pleasure from helping a sick person, just as anyone else would. They do it partly to show the patient what good doctors they are: to improve their professional reputation, so that the patient will select them the next time he is sick, and may perhaps suggest to his friends that they do the same. This will bring them more business; and moreover, if they become very competent, and very well known, and very busy, they may even be justified in asking for larger fees, simply because they are known to have a better than average product—that is, better than average medical skill—to sell.

I have said that doctors are primarily interested in the best medical care for the largest number of people at the most reasonable cost. This seems likely to bring forth the question, which has been asked before and would probably be asked again anyway: "Why, then, haven't the doctors done something about the need for spreading out the costs of medical care?"

This used to be an embarrassing question, sometimes answered by "I don't know"; sometimes by "Well, I don't believe there is any need for it"; or sometimes by "Well, I guess we should have."

It isn't an embarrassing question any longer. The answer to it now is a simple one. It is this: "*They have.* There are now 80 voluntary medical care insurance plans, covering over 4 million people in 33 states—and they are growing larger all the time."

Since this is true, then why is government control of the practice of medicine being demanded? Certainly it is not being demanded in order to make medical care cheaper—it will go on costing just so much for a doctor to be educated, and to live, and just so much for medical services to be rendered: payment will merely be by a compulsory tax instead of by medical fees or voluntary insurance payments. Indeed, the extra, unnecessary, "luxury" calls that are likely to be demanded by many people under a tax supported medical care

This address was delivered over the Radio Forum of the Air, on Station KGU in February, 1947. Addressed to laymen, it contains some ideas thought worth repeating to doctors.

plan will certainly increase the nation's total bill for medical services considerably, rather than decrease it. Certainly government control of the practice of medicine is not being demanded in order to make medical care better—it is better right now in the United States than it is anywhere else in the world, and it is poor enough under the present English government plan, I am told, to have made 600,000 qualified beneficiaries of tax-supported medical care fail to register for medical benefits under the plan. Certainly it isn't being demanded to make people healthier—that is being taken care of now, by doctors and efficient departments of public health; and experience in both England and Germany has shown that the average duration of hospital stays in countries where the government pays the doctor is nearly double that in the United States. Even Dr. Sinai admits that to be the case. Certainly it is not being demanded in order to protect people against the catastrophic costs of unexpected illness—there are voluntary insurance plans, operated like competitive private businesses and not like monopolistic governmental bureaus, which will take care of that problem for anyone who wants it taken care of. Moreover, what about the catastrophic costs of unexpected fires—aren't those adequately covered by voluntary insurance methods? Government control of medical practice isn't even being demanded by the people who are said to be in need of it, but only by people who claim that *other* people are in need of it. If they are in such need of it, it seems odd that they must have it shoved down their throats by a compulsory tax, when it is available to them in the form of voluntary health insurance at a price which they can afford to pay—a price, incidentally, less than the average cost of either tobacco or alcoholic beverages—to anyone who uses either of these—for a comparable period of time.

There seems to be only one reason why government control of medical practice is being demanded. It seems that it is being demanded because it has long been known that it is a necessary preliminary step in the nationalization, the socialization, of a government. This is the reason why it was originally adopted in Germany in 1883—it was a political maneuver on the part of Bismarck, designed not so much to relieve a need for better or cheaper or more widespread medical care, as to win support for his political party. Such control seems to have no other advantages, and it certainly has a host of serious disadvantages. We doctors don't want it, and we don't believe the people will want it when they realize how unsatisfactory it is certain to be.

CERTIFICATION OF SPECIALISTS IN ALLERGY

Physicians specializing in allergy can now be officially certified as specialists in that field by either the American Board of Internal Medicine (subspecialty, Allergy) or the American Board of Pediatrics (subspecialty, Allergy). These two Boards are sponsored by the national societies in each field and by their corresponding Sections of the American Medical Association; they are recognized and approved by the Council on Medical Education and Hospitals of the A.M.A. and by the Advisory Board for Medical Specialties. Presumably this method of dealing with such certification has been arrived at because it was felt that allergy was too broad and inclusive a subject to be subjected to certification within specialties of more limited scope than these, and that it still was not sufficiently mature and independent as a field of medical endeavor to warrant certification by its own Board.

Whether the latter view is correct or not, the American College of Allergists has—in disagreement with it—taken a most unfortunate step toward providing such certification. They have set up their own board, and, unfortunately, have called it an "American Board" and referred to "Certification," thus suggesting that it is a bona fide member of the group of approved boards. They have recently circulated a copy of an editorial from the *Annals of Allergy* for November-December, 1946, citing the criticism they have received and stating their case.

Their case seems weak, indeed. It appears to consist of the claim that the present procedure for forming certifying boards is "shackling"; that efforts to have such a board formed for allergy alone would be "fruitless"; and, pointlessly enough! that the "American Board for the Certification of Allergists does not wish to be identified with the present system of subcertification." They make the claim that their standards for certification are higher than those required for subcertification—though, presumably, they do not go so far as to require preliminary certification in either pediatrics or internal medicine.

The height of their standards, and the "officialness" of their pronouncements, are beside the point. The point is that if any self-styled society of specialists is to create its own certifying board, instead of having—as heretofore—a unified, more or less mutually exclusive series of specialty boards approved by the American Medical Association, then control is lost; anything can happen. We may expect presently a diploma awarded by an American Board of Endoscopy, an American

Board of Psychoanalysis, or an American Board of Cosmetic Dermatology—with what basic guaranty of sound fundamental standards? None.

The College of Allergy says its standards are high, and so they may be; but will they remain high? Will they be soundly administered? Who will check on them? Who will set the standards for the "wildcat" boards that may follow? What, finally, will happen to the prestige of the orthodox, A.M.A.-sponsored Specialty Boards? Probably nothing; but they're too valuable a national asset to be so light-heartedly by-passed for such thoroughly inadequate reasons as those offered by the American College of Allergy.

GENERAL PRACTITIONERS PLEASE NOTE!

An organization meeting for a new national society for general practitioners was held in Atlantic City in June, according to Dr. E. C. Texter, chairman of a committee on organization and membership. It is anticipated that General Practice Sections will be established in many local hospitals. Those interested should read the excellent article in the May 3 issue of the J.A.M.A. regarding the functioning of such a section in a general hospital where it has been a going concern for the past eight years and is still flourishing.

It is hard to understand why the "G.P." is so often referred to as the "lowly" G.P. He has no reason to feel sorry for himself, unless the fact that he's hard-worked constitutes such a reason, as well it might. He is, after all, the guy at whom the few bouquets doctors get have really been thrown. He's the man Robert Louis Stevenson was talking about when he wrote those superlatively complimentary paragraphs entitled "The Doctor." And he's the only medical practitioner, finally, who finds it unnecessary to make any public avowal of his ignorance of, or lack of competence in, all fields of medicine except the one in which he "specializes"—for he specializes in them all.

He specializes in them all, because he practices them all. He knows, if he is wise, his limitations; and though he does not exceed them, he is constantly trying to extend them. It is for this reason that a General Practice Section in a general hospital is most particularly to be desired, because it provides a means of accomplishing this: a means whereby general practitioners may carry on their own post-graduate education and establish and maintain their own standards of professional excellence.

THE HAWAIIAN SOCIETY OF X-RAY TECHNICIANS

Twenty-four Honolulu x-ray technicians met last April and organized a local chapter of the American Society of X-Ray Technicians. Ronald Ring, at the 147th General Hospital, was elected president; Henry Kuwaye, at Lanakila Health Center, vice-president; Masaru Uehara, of Kuakini Hospital, secretary; and Virginia Record, at The Queen's Hospital, treasurer. Miss Aagot Ramberg, at The Clinic, was appointed by the national society to be Counsellor for the new group.

The new organization has a detailed and business-like constitution and by-laws, which provide among other things that members must be in good standing with the American Registry of X-Ray Technicians, and that members may accept patients for radiographic or therapeutic work only under the direction and supervision of a qualified medical practitioner.

The minutes of their first regular meeting, in May, indicate that a helpful interchange of practical ideas in conducting radiographic procedures will be one of the useful practices which the new society will make possible for its members.

The secretary of the organization has asked for constructive criticisms from the Hawaii Territorial Medical Association. It is anticipated that physicians will be asked to address the new organization from time to time, and we have no doubt they will be glad of the opportunity to do so.

Post-Graduate Lectures

1. THE MACROCYTIC ANEMIAS*

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In studying the peripheral blood there are several observations which should be made, as they furnish important information concerning the presence and variety of anemia which may be present. They are: (1) the *hemoglobin level* and the *red blood cell count,* which give information concerning the balance between the formation and destruction of red blood cells and indicate the presence or absence of an anemia; (2) the level of the blood *bilirubin,* which provides some indication of the rate of blood destruction in the absence of hepatitis; (3) the percentage of *reticulocytes* in the circulating blood, which is an approximate measure of the rate of blood formation; (4) *hypochromia* which is usually an indication if iron deficiency; (5) a *macrocytosis* or predominance of large red blood cells which usually results from a deficiency of the liver principle; (6) a *normocytic* blood picture and the presence of *"foreign cells"* in the material obtained by sternal puncture, which are indications of a myelophthisic anemia. While there are important exceptions to the above statements, nevertheless the information obtained by these methods enables the physician to determine first, whether an anemia is present, and second, its type and the treatment which is indicated.

Although all of the information indicated above is desirable in the study of a patient with anemia in order to make a diagnosis, it is possible, if an accurate hemoglobin determination is available and the amount of hemoglobin contained in the cells (the mean corpuscular concentration) is known, to determine whether an anemia is present and to gain some information concerning its type. The mean corpuscular hemoglobin concentration gives a type of information similar to that obtained by means of the color index. It is calculated, however, by dividing the hemoglobin in grams by the hematocrit reading in per cent, which eliminates having to determine the red blood cell count.

The Blood Survey at the University of Michigan Hospital

In 1942 a blood survey was instituted on all patients who presented themselves to the University of Michigan Hospital, regardless of the nature or severity of their complaints or of the division of the hospital to which they were admitted. The following information was obtained: hemoglobin determination by means of the Klett-Summerson photoelectric hemoglobinometer, standardized by the Van Slyke oxygen capacity method so that 100 per cent was equivalent to 15.6 grams of hemoglobin per 100 cc.; the hematocrit determination; and the mean corpuscular hemoglobin concentration.

The Normal Hemoglobin Level

A study of the hemoglobin level of the blood of adults in the past few years has indicated to me that the lower limit of normal in the circulating blood for males [in Michigan?—Ed.] is 84 per cent (13.1 grams per 100 cc.) and for adult females 78 per cent (12.2 grams per 100 cc.). This is on the basis that 100 per cent hemoglobin is equal to 15.6 grams per 100 cc. of blood. Readings below these arbitrarily selected levels of normal are regarded as indicative of an anemia which is clinically significant. It is of interest to add at this point that when the hemoglobin falls to approximately 70 per cent (14.2 grams) the symptoms of anemia such as weakness, ease of fatigue, dyspnea and palpitation make their appearance. Also, another important hemoglobin level is 64 per cent (10.0 grams), which is the lower limit of normal for the physiological anemia of pregnancy.

The Incidence of Anemia in Hospital Patients

Employing the criteria mentioned above, it was determined that in approximately 11,000 admissions to the out-patient and in-patient departments of our hospital, a total of 12.5 per cent of the patients had an anemia which was regarded as clinically significant. Furthermore, it was considered that in 7 per cent it was slight in extent; in 2.4 per cent it was moderate; in 1.2 per cent it was moderately severe; and in 1.9 per cent it was severe. If the slight anemias were disregarded, it may be stated that 5.5 per cent of our in-patients and out-patients had an anemia which was moderate, moderately severe or severe.

The Type of Anemia

By means of the mean corpuscular hemoglobin concentration (M.C.H.C.) it was possible to classify all of the anemias thus detected into three main types, as follows: (1) Forty-one per cent had a *hypochromic anemia* in which the M.C.H.C. (mean corpuscular hemoglobin concentration) was *less* than 30 per cent; this represents the anemias with a low color index, and in almost every instance they were of the iron deficiency type; (2) Thirty-nine per cent had a *mild normochromic anemia* characterized by a M.C.H.C. of *30 per cent or higher.* When this type was mild in nature (simple chronic anemia) it was most frequently due to chronic infection; (3) Twenty per cent had a *moderate to severe normochromic anemia* with a M.C.H.C. of *30 or higher,* which included the more pronounced anemias due to infection, the anemia of nephritis, myelophthisic anemia, pernicious anemia and other macrocytic anemias, the hemolytic anemias, aplastic anemia, some anemias of pregnancy, and acute post-hemorrhagic anemia.

Pernicious Anemia and Other Macrocytic Anemias

The macrocytic anemias are so designated because if the average cell volume of the erythrocytes is determined, it will be found to be larger than normal. The volume measurement of the red blood cells is a most valuable procedure in order to recognize the nature of any type of anemia. The mean corpuscular volume in cubic microns (M.C.V.) is calculated by dividing the hematocrit reading in per cent by one-tenth the red blood cell count. For example, if the hematocrit is 45

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per cent and the red blood cell count is 5.0 millions per cubic millimeter, the M.C.V. equals 45/.5 or 90 cubic microns. Normally the M.C.V. varies from 86 to 96 cubic microns. In pernicious anemia and other macrocytic anemias it is usually over 100 cubic microns and in some instances it may reach 150 cubic microns. In pernicious anemia in relapse it is commonly between 110 and 130 cubic microns. In iron deficiency anemia it is below 86 cubic microns and usually varies between 60 and 70 cubic microns. As the erythrocytes in pernicious anemia contain a normal amount of hemoglobin, it should be designated as normochromic.† Hence pernicious anemia is a normochromic, macrocytic anemia, as are almost all other macrocytic anemias. On the other hand, as an iron deficiency anemia has small cells and a M.C.H.C. below 30 per cent, it is designated as a microcytic, hypochromic anemia.

Included in the macrocytic anemias are the following: Addisonian pernicious anemia, the anemia associated with sprue in 95 per cent of the patients, the macrocytic anemia of pregnancy, the macrocytic anemia of liver disease, some nutritional disorders (deficiency of the extrinsic factor) in some patients with pellagra, in various types of gastro-intestinal disorders such as gastrectomy, intestinal stenosis, short-circuiting operations, and occasionally in patients with chronic ulcerative colitis, and in fish tapeworm infestation.

These types of anemia are important not because they are common but because they are usually amenable to anti-pernicious-anemia medication. Previous to 1926 there was no form of therapy for such anemias that was in any sense helpful. Some of these anemias, such as the pernicious variety, were invariably fatal within two to three years. With the introduction of liver therapy by Minot and Murphy in 1926, it became possible to control this variety of anemia and in many instances the patient survives a normal span of life.

Pernicious Anemia

This condition may be defined as a macrocytic anemia attributable to a failure of the glands of the stomach to secrete a sufficient quantity of a thermo-labile enzyme-like substance which is thought to be essential to the normal maturation or development of the red blood cells in the bone marrow. This condition usually occurs in adult life, and when fully developed is characterized by the *symptoms of an anemia,* frequently associated *paresthesia* of the hands and feet, recurrent *glossitis,* degenerative changes in the posterior and lateral columns of the *spinal cord,* and invariable gastric *achlorhydria.* It always progresses to a *fatal termination,* usually with remissions, unless specific therapy is instituted.

The Relation of Folic Acid to the Etiology of the Macrocytic Anemias

The first publication in which it was stated that crystalline folic acid is effective in the treatment of pernicious anemia was that by Spies and his associates in 1945 in the *Southern Medical Journal.* Since then it has been determined that folic acid, a crystalline component of the vitamin B complex, a substance of known composition which can be synthesized in the chemical laboratory, is effective in controlling the anemia of pernicious anemia, sprue, the macrocytic anemias of infancy and of intestinal disorders, and probably of all types of anemia which are amenable to liver extract therapy. A fuller discussion of this topic will be given below.

In my opinion, the discovery of the action of folic acid is not so important from a therapeutic standpoint as it is in providing new and important information which is concerned with the etiology of the macrocytic anemias, and especially pernicious anemia. From the work of numerous observers, it has been determined that a defect in folic acid metabolism is probably responsible for the development of the macrocytic anemia of various conditions. It has been determined by Bethell, Swendseid and their associates, and by Welch and his associates, that the probable cause of the anemia of pernicious anemia is a defect in the metabolism of folic acid. This vitamin exists in the conjugated or bound form in many food products but it must be split into free folic acid in order to perform one of its important functions, which is to control the rate of formation of red blood cells in the bone marrow. It is possible that normally the liberation of folic acid is accomplished by means of the liver principle, which in turn is formed by the interaction of the extrinsic factor in the food and intrinsic factor in the gastric juice. This principle thus formed may act to neutralize the effects of an "inhibitor," also present in the food, which prevents the conjugated form from liberating free folic acid. When the effect of the "inhibiting substance" in the diet is neutralized, then the conjugated form is acted upon by a conjugase occurring normally in the body and possibly secreted by the small intestine. In patients with pernicious anemia it is thought, at least tentatively, that the defect is a diminution or lack of the intrinsic factor in the gastric juice. As a result the liver principle cannot be formed, the "inhibitor" in the food is not neutralized, and the conjugated folic acid remains in the bound or inactive form. In such a state, it is not available for the control of the maturation of the erythrocytes in the bone marrow. The essential lesion of pernicious anemia is, therefore, a diminished rate of production of the red blood cells in bone marrow, because free folic acid is not available in a normal amount. This comes about because of an inability of the patient with such an anemia to split the conjugated or bound and inactive form of the substance into the active or free form. Although the mechanism of the failure to make available free folic acid for the purpose of controlling the normal rate of erythrocyte maturation may be different in the various forms of macrocytic anemia, the end result is the same. For this reason, such anemias can usually be controlled by anti-pernicious anemia medication.

The Treatment of Pernicious Anemia and Other Forms of Macrocytic Anemia

The treatment of pernicious and allied forms of anemia is a relatively simple matter if a few guiding principles are kept in mind. In the first place, it is necessary that one be sure of the diagnosis because *anti-pernicious-anemia medication is of no value in other conditions.* Second, an *adequate dosage* of anti-pernicious anemia medication should be administered to cause the blood to return to normal in the shortest possible time. This having been accomplished, a sufficient amount should be given to maintain the blood at a normal level.

† The term "hyperchromic" anemia should not be employed. Although some red blood cells in the macrocytic anemias may appear dark, and actually contain an increased amount of hemoglobin by weight, they are not *supersaturated* with it. The *concentration* of hemoglobin, as indicated by the mean corpuscular hemoglobin concentration, is not increased. The cells appear darker than a normal red blood cell because they are thicker.

Experience has shown that the most effective form of therapy for the treatment of pernicious anemia is the *intramuscular injection of liver extract.* Only U.S.P. preparations should be employed, as they have the advantage of having been certified for potency in terms of units. A unit is defined as the amount of material which, when given daily, will produce a maximum reticulocyte response and a satisfactory increase in the red blood cell count. Liver extract for intramuscular use is available in strengths of 1, 2, 2.5, 3, 4, 5, 10 and 15 units per cubic centimeter. The 15 unit preparation has a small bulk, and hence is more convenient for general use. I see no indication for the use of the more dilute preparations. Some claim, but without substantial support, that the more dilute preparations are more effective in the treatment of the neurological manifestations of pernicious anemia, but this is not true in my experience.

When giving liver extract intramuscularly, the best advice to follow is to give an excess rather than an underdosage. This is for the following three reasons: (1) excessive dosage can do no harm; (2) an underdosage with a resultant slight decrease in the red blood cell count may result in a progression of the neurologic manifestations; (3) even if an excess is given intramuscularly, it is retained in the tissues and ultimately absorbed. It constitutes, therefore, a depot or reserve which is useful if an infection develops, or if for some reason one or more doses are omitted.

In the practical management of a patient with pernicious anemia, it is my custom to administer intramuscularly 1 cc. daily for a period of one week. Following this I give 1 cc. three times weekly until the red blood cell count is normal (4.6 million per cubic millimeter for males and 4.1 million for females being the lower limit of normal). When the levels of 4.5 to 5.0 are reached, *and it is much better to have a high normal than a low one,* then a maintenance dose *must be given continuously thereafter* throughout the individual's life. This dosage varies, but it is far safer to give an excessive amount than a suboptimal one. It is my custom to inject 1 cc., containing 15 units, every two weeks, which is usually adequate to keep the blood in normal condition. If an infection should develop, or if the individual is in the older age group, a larger dosage may be necessary. The important point for emphasis is that the *blood must be maintained at a high level of normal, and the patient be kept free from symptoms such as glossitis, paresthesia, and all evidence of anemia.*

The key to the treatment of the neurological changes is to *keep the blood always within normal limits.* If this is done, these manifestations will not appear if they are absent when the patient is first seen; they will not progress if present; and if they have not been present for more than one year, the chances are excellent that they will improve greatly.

Ordinarily it is not necessary to administer any other medication than liver in order to achieve the proper results. I have discarded dilute hydrochloric acid medication long ago because experience indicated it was of no value despite the universal and persistent achlorhydria in patients with pernicious anemia. Rarely if ever is it necessary to prescribe iron, because usually patients with pernicious anemia have an excess of iron in the body tissues. In some instances, however, a patient with a macrocytic anemia may also have an iron deficiency, due to either chronic hemorrhage or a low iron intake. Under these circumstances, iron should be given in the form of enteric coated ferrous sulfate tablets 0.3 grams (5 grains) t.i.d., a.c.

Allergy and Liver Extract

In about 5 per cent of the patients who receive liver extract parenterally, allergic manifestations develop. These vary in extent from a slight "stuffiness" of the nose to outspoken asthmatic attacks and anaphylactic shock. Death from this cause has been reported in an elderly person. The allergic symptoms are quickly relieved by the administration of 0.3 to 0.5 cc. of a 1-1000 solution of epinephrin hydrochloride solution given subcutaneously, and in most instances they may be prevented by the administration of this medication about 5 or 10 minutes before the liver extract is given. Such patients apparently suffer from an organic rather than a species sensitivity because liver extract from beef or swine livers may produce the same allergic effects in sensitized patients. On the other hand, liver *orally* may not produce the same untoward results, and desiccated stomach may be employed with impunity in such sensitized patients. It has also been determined that folic acid can be given to such patients without evoking an allergic response. The combination of folic acid, 10 milligrams daily, with Ventriculin, 40 grams a day, is also effective and safe to try in such patients.

For the present, however, probably the best plan is to desensitize the patient by giving an initial dose of 0.1 cc. of a 1-10 dilution of liver extract subcutaneously, and increasing this 0.2 cc. every second or third day for about three weeks. At the end of this time the patient will be receiving a full dose of liver extract. It is wise, however, when desensitizing such a patient, to have a hypodermic syringe with epinephrine solution available to control any immediate untoward symptoms if they should develop. In some instances a liver-stomach preparation (Extralin) may be given orally in doses of 2 grams (4 pulvules) three times daily without producing allergic symptoms, and such doses will usually maintain the blood at normal.

The Use of Folic Acid As a Therapeutic Agent

Further experience is required in order to evaluate the therapeutic effectiveness of folic acid in the macrocytic anemias. In the first place, it should be emphasized that all evidence indicates it to be effective only in the macrocytic anemias, and that *it is of no value in other anemias.* It will cause the blood of patients with pernicious anemia and allied anemias to return to normal in most instances by the intravenous or oral use of 10 mg. daily. Having reached normal, it can usually be maintained there by 5 to 10 mg. daily. Additional experience is necessary, however, before the effectiveness of this form of therapy can be finally determined. There are three important handicaps to folic acid therapy at present. First, the preparation is *expensive:* second, and most serious, there is evidence to indicate that in the dosage employed, it controls only the anemia and glossitis of pernicious anemia and in some instances the *nervous system lesions* of pernicious anemia have *progressed* while under treatment with this therapeutic agent; and, third, I have the impression that in some patients the red blood cell count will increase to the vicinity of 3.8 to 4.0 millions per cubic millimeter, and not attain a higher level with this therapy. Further observations are necessary, however, to decide this point definitely.

Folic acid therapy has two possible advantages. In the first place it would be of considerable help to have

a highly concentrated and effective therapeutic agent for the macrocytic anemias which can be given orally. Second, it would be of great value to be able to give such a preparation to patients who become allergic to liver extract.

In conclusion, let me reiterate that the most effective form of anti-pernicious anemia medication which is available at present is the *intramuscular injection of a potent and concentrated liver extract.* Other forms of therapy should not replace this type of medication until there is convincing evidence that they are of equal or greater efficacy.

II. ANEMIAS OTHER THAN THE MACROCYTIC TYPES

As I emphasized in my lecture of yesterday, the two most common types of anemia which are encountered in the northern part of the United States are the *iron deficiency* variety, which makes up 41 per cent of all the anemias observed by us at the University of Michigan Hospital, and *simple chronic anemia,* which has an incidence of 39 per cent. Clearly, iron deficiency is the most important of all anemias because it occurs most frequently, and, furthermore, because iron medication is highly effective in treating this blood disorder. I will discuss the etiology and treatment of this variety of anemia first.

Iron Deficiency Anemia

This condition may be defined as a commonly occurring microcytic hypochromic anemia which is due to an inadequate supply in the body of available iron for the formation of the normal amount of hemoglobin in the circulating blood. The exhaustion of the iron reserve most commonly results from chronic hemorrhage. In the male this occurs most frequently from the gastro-intestinal tract and in the female from the uterus. Other causes are a dietary intake which is low in iron; malabsorption from the intestines; an increased demand for the metal as observed in pregnancy and during the rapid growth of infants, children and adolescents; or any form of infection which appears to interfere with the normal synthesis of iron to form hemoglobin. Regardless of the underlying cause, there is usually a gratifying response to the therapeutic administration of iron. It is now accepted that the nutritional anemia of infancy and childhood, chlorosis of adolescent girls, the hypochromic anemia of pregnancy and of chronic blood loss, and the "idiopathic" hypochromic anemia of adult women, are all of the iron deficiency type, and differ only on account of the age and sex of the persons affected.

The Normal Metabolism of Iron in the Body

The normal adult ingests a diet which contains (per day) about 15 milligrams of iron in the ferric state. The hydrochloric acid of the stomach ionizes it and also prevents the formation of insoluble iron compounds. The ferric iron is reduced to the ferrous state in the upper intestinal tract by means of a chemical process which is not clearly understood. It has recently been established by the use of radioactive iron in dogs that *the body will not absorb iron from the intestinal tract unless there is a lack of the element in the body.* After being absorbed, the major portion of the iron is incorporated into the hemoglobin molecule and the remainder is stored, largely in the spleen, liver and bone marrow, although iron is known to be present in every cell of the body. The total iron content of the human body is about 4.2 grams, of which 60 to 70 per cent is found in the circulating hemoglobin of the blood. It is estimated that normally there is a sufficient quantity of iron in the normal body reserves to provide for the regeneration of approximately 800 cc. of blood. If this quantity of blood were lost by an adult with normal iron reserves, the blood could regenerate at a normal rate without the administration of additional iron medication. Hence, except in case of exhaustion of the iron reserves by previous hemorrhages or other causes, iron medication is of no value in acute hemorrhage unless the amount of blood lost exceeds approximately 800 cc.

The Diagnosis of Iron Deficiency Anemia

When it has been determined that a patient has an anemia, the first thought should be that it is either of the *iron deficiency* type or the *simple chronic* variety. This is because these two anemias make up 80 per cent of all those encountered in the United States. If the anemia is due to iron deficiency it will be of the microcytic hypochromic type. This is characterized by small red blood cells which have a mean corpuscular volume usually between 60 and 70 cubic microns, and a deficiency of hemoglobin per cell, as shown by a mean corpuscular hemoglobin concentration of less than 30 per cent. In association with the latter condition, the color index is below 1.0 and usually is in the vicinity of 0.5.

When an anemia is present with these characteristics, then one should at once consider the possibility that the patient has a deficiency of iron. Most frequently this is due to chronic hemorrhage. In the male, the bleeding usually occurs from the gastro-intestinal tract, and it is most commonly due to hemorrhoids, peptic ulcer, or carcinoma of the stomach. Other causes to be considered are esophageal varices in association with cirrhosis of the liver, chronic ulcerative colitis, and carcinoma of the caecum, the sigmoid or rectum. In the female, hemorrhage from the gastro-intestinal tract is also of importance but it is exceeded in frequency by excessive uterine bleeding. It has taken the medical profession an amazingly long time to appreciate that an excessive amount of blood may be lost by excessive menstrual bleeding, despite the fact that the patient will *insist* that her menstrual periods are normal. Observations have shown that a patient may state positively that her menstrual flow is not excessive, when twice as much blood as normal is lost regularly at the periods. In the presence of a microcytic hypochromic anemia in a woman during the period of reproductive life, the possibility that a hypochromic anemia is due to an abnormal loss of menstrual blood should be considered despite the statement by the patient that the periods are normal in all respects.

The Treatment of Iron Deficiency Anemia

In the treatment of an iron deficiency anemia, two aspects of the therapy should be given attention. First, *the cause should be eliminated* or controlled if possible. In most instances this means giving attention to gastro-intestinal bleeding: treating a peptic ulcer or cancer, or controlling uterine bleeding. It is not within the scope of this discussion to consider these matters, except to say this. Every physician knows that when abnormal

uterine bleeding is present, the patient should have a careful study of the pelvic organs, including curettage, in order to determine if it is due to cancer or a fibroma, or some other recognizable lesion. If the various forms of organic pathology are eliminated as a cause for the abnormal bleeding, then the diagnosis of "idiopathic" menorrhagia or metrorrhagia must be made. Treatment for this condition has not been satisfactory in my experience. In some patients the blood cannot be kept within normal limits with large doses of iron because the loss is so excessive that it exceeds the rate of formation. When these circumstances are present, radical measures should be contemplated. I hesitate to advise x-ray castration for the control of this condition, on account of precipitating the symptoms of a premature menopause. I would prefer to consider hysterectomy in the presence of severe, persistent idiopathic menorrhagia or metrorrhagia which defies all other means of control and accounts for a severe anemia of the microcytic hypochromic type.

The dose of iron is an important matter for consideration. In my experience ferrous sulfate 0.3 grams (5 grains) t.i.d., a.c., or ferrum reductum in capsules, 0.5 grams ($7\frac{1}{2}$ grains) t.i.d., a.c., are the most satisfactory preparations to employ. If gastro-intestinal disturbances result, which have occurred rarely in my experience, despite reports to the contrary, two measures may be employed. One, the iron may be given in the form of enteric coated tablets, and second, it may be administered following meals. If the medication in the dosage suggested does not produce satisfactory results after a trial of two weeks, then ferrous sulfate should be given in doses of 0.6 grams (10 grains) t.i.d. over an extended period. If such medication is not effective after a fair trial, it may then be concluded (1) that the patient does not have an iron deficiency anemia, (2) that the loss of blood exceeds the amount formed even when iron medication is given, or (3) that the patient is not taking the medication as directed.

In my opinion *iron should be given only by mouth.* This is because it is almost always effective when administered by this route. Furthermore, if a sufficient quantity for therapeutic purposes is given subcutaneously or intravenously, serious reactions may occur. A knowledge of this has resulted in the recommendation that a smaller dose be administered which in most instances is inadequate and hence productive of little good. I should like also at this time to emphasize that in my experience there is nothing which can be added to iron to increase its effectiveness, despite numerous claims to the contrary. By this statement I mean that liver, Ventriculin, copper, or other chemical or biological elements *do not enhance the effect of iron* in adequate doses in the treatment of iron deficiency anemia. It is important to keep in mind, however, that the addition of those substances often does materially increase the cost to the patient.

My recommendation, therefore, in the treatment of iron deficiency anemia is to *correct the cause* if possible, and then *give iron orally*, and *iron alone*, in the doses I have stated.

Simple Chronic Anemia

This term is employed to include a large group of anemias which are characterized by red blood cells which are of the usual size and contain a normal amount of hemoglobin. Such an anemia is, therefore, normocytic and normochromic in character, the mean corpuscular volume being between 86 and 96 cubic microns. The mean corpuscular hemoglobin concentration varies from 30 to 33 per cent. Ordinarily the anemia is not severe, for the red blood cell count is usually in the vicinity of 3.5 million per cubic millimeter, and the hemoglobin about 70 per cent (10.7 grams).

The term "simple chronic anemia" is based on the usual findings that the anemia is mild, and that it is characterized by chronicity, and the changes in the blood are not striking. If many of the anemias which were originally included in this group are excluded, such as myelophthisic anemia, the anemia of Addison's disease and of myxedema, the anemias of pregnancy, and others due to well recognized and important causes, then *95 per cent of those left* in this classification would be *due to chronic infection* of one kind or another, and a smaller group which is associated with *chronic nephritis* with nitrogen retention in the blood stream.

The types of infection which are most commonly the cause of such an anemia are as follows: urinary tract infection, either with or without obstruction due to enlargement of the prostate gland; pelvic infection in women; chronic pulmonary infection such as observed in bronchiectasis, chronic empyema, and lung abscesses; rheumatoid arthritis and rheumatic fever; brucellosis; streptococcus viridans infection; and many others. It should be emphasized that the so-called focal infection about the teeth and tonsils or elsewhere is *not* important in the etiology of this type of anemia.

The cause of simple chronic anemia due to infection is in some way related to an impaired synthesis of hemoglobin but it is not clear from the information at hand just what the mechanism of this is. It is universally recognized by hematologists that in the presence of an infection, the rate of formation of hemoglobin falls below normal and an anemia results.

This form of anemia may also be associated with advanced chronic nephritis with retention of nitrogen in the blood stream. It is likewise present in association with chronic prostatic obstruction, and in patients with congenital polycystic kidneys. In my experience, however, it has never occurred in these conditions unless there is an elevation of the non-protein nitrogen in the circulating blood, and usually also an associated acidosis.

The treatment of simple chronic anemia is not entirely satisfactory. Fortunately, in many instances, the anemia is so mild that it does not demand serious attention. Furthermore, the cause, such as a severe infection or advanced nephritis, so greatly exceeds the anemia in the production of symptoms, that the blood condition is usually of secondary importance. Liver, stomach, iron and folic acid are of no avail in such anemias. There are only two therapeutic measures which need be considered. They are: (1) the *removal of the cause*, if this is possible; (2) the administration of *blood transfusions* provided the anemia is of sufficient severity and contributes importantly to the clinical picture.

The Anemia of Pregnancy

An anemia of pregnancy is one due primarily to the gravid state in which there is a reduction in the hemoglobin below 10 grams (64 per cent) or in which the red blood cell count is below 3.5 million per cubic millimeter, or in which both changes are present. It is recognized that the blood volume increases in pregnancy and consequently normally there is a dilution of

the hemoglobin content and red blood cells of the circulating blood. This increase in blood volume and resultant dilution begins early in pregnancy and reaches its maximum of approximately 26 per cent about the sixth month of pregnancy and continues until several weeks after delivery. As a result of this dilution, the red blood cell count may be reduced to as much as 3.5 million per cubic millimeter and the hemoglobin to 10 grams (64 per cent), and still the blood be regarded as normal for the pregnant state. Any reduction below these limits, however, must be considered as pathological and regarded as a true rather than a physiological anemia of pregnancy.

The Incidence of the Anemias of Pregnancy

I doubt if the average physician appreciates the fact that the anemias of pregnancy are so common, and, furthermore, that a very large majority of them can be prevented or controlled by simple therapeutic measures. Several years ago Dr. Frank H. Bethell and his associates of the Simpson Memorial Institute staff showed that approximately 54 per cent of all supposedly healthy pregnant women who came to our obstetrical out-patient department in the University Hospital had a pathological anemia. Additional observations made in two of the rural counties of Michigan showed that such an anemia was present in 30 per cent of all cases. If these figures hold true for the United States at large it would mean that 750,000 pregnant women in the United States have an anemia of significance which in most instances can be prevented by simple and inexpensive measures. If the entire world is considered when such estimates are made, the prevalence of these anemias would probably be appalling.

In our experience there are two important anemias of pregnancy. One, the microcytic, hypochromic type due to an iron deficiency, is the more common. It was found to make up 27 per cent of the anemias in the pregnant women observed by us. The second variety, a mild macrocytic normochromic type, was found to be present in 15 per cent of the pregnant women. In 12 per cent there was a combination of the two types, characterized by a macrocytic, hypochromic anemia.

The *iron deficiency anemia of pregnancy* is due to a combination of factors. In the first place there is an increase in the requirements for iron during the pregnant state. This is due to fetal needs; to form additional erythrocytes in an attempt to compensate, in part at least, for the anemia due to the plasma volume increase; and to meet the demands due to the formation of additional maternal tissues. It is estimated that these needs are in part compensated for by the absence of menstrual periods during the gravid state. One additional etiological factor of considerable importance is that an appreciable number of women of the child-bearing age have a mild hypochromic anemia due to iron deficiency *prior* to pregnancy, and this is accentuated by the increased blood volume associated normally with the gravid state. This is accomplished not only by the augmented demand for iron by the fetus but also by the dilution of the blood as a result of the increased blood volume in the mother. For example: if a woman has a hemoglobin of 70 per cent before pregnancy, the blood dilution factor *alone* would reduce this to 58 per cent by the sixth month when the maximum increase of 26 per cent occurs in the blood volume.

The *macrocytic anemia of pregnancy* is normochromic in type; that is, each red blood cell contains its normal quota of hemoglobin. The red blood cell count is usually between 3.0 and 3.5 million per cubic millimeter, and the hemoglobin from 9.3 to 10.9 grams (60 to 70 per cent).

The cause of this type of anemia has long remained a mystery. Several years ago Dr. Frank H. Bethell found that such patients invariably partook of a diet which was low in protein. His studies indicated that when a pregnant woman had an animal protein intake of 50 grams or more daily, such an anemia was not present. In those with an intake of 30 to 49 grams daily, however, it was present in 10 per cent of the cases, and in those with an intake of only 30 grams daily or less, such an anemia was present in 14 per cent of the patients.

Furthermore, these studies suggest that a protein deficiency may be responsible for the severe so-called "pernicious anemia of pregnancy" which resembles true pernicious anemia closely from a hematological standpoint. In my opinion such an anemia is merely an accentuation of the milder macrocytic anemia of pregnancy due to a low dietary intake of protein.

Treatment of the Anemias of Pregnancy

The most important feature of the treatment of such anemias is to prevent their occurrence. This may be accomplished by very simple and inexpensive measures. As soon as it is determined that pregnancy exists in any given woman, then two therapeutic measures should at once be instituted and continued throughout pregnancy and lactation. They are, (1) *ferrous sulfate* should be given in enteric coated tablets in a dosage of 0.3 grams (5 grains) t.i.d., a.c., and (2) the protein of the diet should be augmented to at least *50 grams of animal protein daily*. This may be accomplished simply by giving a minimum of this variety of food in the form of one quart of milk daily (skimmed milk if the patient is obese), one-fourth pound of lean meat, and one egg daily.

By these simple measures it is possible to avert the development of both the microcytic and macrocytic anemias of pregnancy in practically every case. If either type of anemia is present when the patient is first observed, the treatment should be the same as it is in the non-pregnant state. If a patient has a severe macrocytic anemia with a red blood cell count below 2.5 million per cubic millimeter, emergency blood transfusions should be considered, and 1 cc. injections of liver extract (15 units per cc.) should be given intramuscularly daily for a week, and three times weekly thereafter until the blood reaches normal limits.

The importance of controlling the anemia of pregnancy cannot be over-estimated. In many cases it will permit lactation which otherwise would not be possible, convalescence is shortened, puerperal infection is less likely to occur, and of the greatest importance, the child will be born with adequate iron reserves. If there is a deficiency of iron in the infant's body at birth, the blood may be normal at that time but during the course of the first year an iron deficiency anemia is likely to develop.

Hemolytic Anemia

There is only one other type of anemia for which there remains time to discuss briefly. This is the hemolytic type which may be observed in the hereditary and acquired forms. These anemias are mentioned because splenectomy is almost invariably curative in the heredi-

tary type and often is effective in the control of the acquired variety.

In *congenital hemolytic anemia*, either the mother or father has a similar condition and it may also be present in other consanguineous relatives. Such patients often have only a mild *anemia* for long intervals, a slight *icteric tint*, and a palpable *spleen* which is usually not grossly enlarged. At intervals they may have *crises* in which there is abdominal pain, fever, a rapidly decreasing red blood cell count, and a striking increase in the icterus. In about two-thirds of the patients, bilirubin *gall stones* develop. The anemia in such patients is normochromic and may be either microcytic, normocytic or macrocytic. There are three important findings in the circulating blood in addition to the anemia. (1) There is increased *fragility* of the red blood cells to hypotonic salt solutions, (2) an increase (10-20 per cent) in the *reticulocytes* of the circulating blood, (3) small dark staining red blood cells which are called *microspherocytes* are present in the circulating blood. In addition, the blood *bilirubin* is almost always elevated above normal. This is interpreted as indicative of increased red blood cell destruction.

The *acquired* type resembles the hereditary variety with the exception that it more commonly appears in young adult or later life, rather than in infancy and childhood. The white blood cell count is usually normal and the cells may or may not have an increased fragility. Care should be taken in all cases of hemolytic anemia to eliminate all poisons and drugs which might cause hemolysis of the red blood cells such as the sulfonamides, lead and phenylhydrazine. Such an anemia may also be due to malaria, and occasionally to Hodgkin's disease, leukemia, or carcinomatosis, or secondary to a dermoid cyst.

In the treatment of the hemolytic anemias it should be emphasized that when the *hereditary* variety is present, *splenectomy* is indicated without delay as soon as the diagnosis is established and when the patient is in condition to withstand the operation. In the *acquired* variety, a more conservative attitude should be adopted. Again it should be reiterated that all known causes such as drugs and poisons should be eliminated as should various other blood dyscrasias to which the condition might be secondary. It is usually advisable to transfuse the patient a number of times if the anemia is severe enough to warrant such a therapeutic measure and to keep the patient under observation for several weeks to months. If convincing evidence of improvement is not observed during this interval, then splenectomy should be considered. The results of this procedure in such patients, while often satisfactory, cannot be predicted with as much certainty as they can in patients with the hereditary form of the disease.

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BOOK REVIEWS

Techniques and Procedures of Anesthesia. By John Adriani, M.D., 1st Edition, Pp. 404, 122 illustrations. Price $6.00. Charles C. Thomas, Springfield, Illinois. 1947.

Although it is impossible to put into one book all topics and details of the varied techniques of anesthesia, the fundamental principles are well presented. Not only are the technical details enumerated, but the associated reasons for executing them are outlined. Sketches and photographs are used freely, and well illustrate stressed details.

The book is written in outline form. It is concise, complete and covers all types of anesthesia procedures, both inhalation and regional. It is an ideal book for students in that it simplifies the process of learning, as the most important points are presented in a clear, compact and comprehensive manner.

I most highly recommend this book for all beginners in anesthesia as well as for all those who teach techniques and procedures of anesthesia. It is also a very convenient reference book and would be of value to anyone who is desirous of knowing the more recent drugs used in anesthesia and the techniques for their administration. The chapters on oxygen therapy and resuscitation are very enlightening, not only to the anesthetist, but all First Aid groups as well.

ROSELYN SUTCLIFFE, R.N.

Penicillin Therapy, Including Streptomycin, Tyrothricin and Other Antibiotic Therapy. By John A. Kolmer. Ed. 2, New York, D. Appleton-Century Co., 1947.

The second edition of John Kolmer's book on antibiotic therapy is a useful book. It presents a fund of information regarding penicillin, the best drug of the group. The voluminous literature on the subject accumulated in the last few years is well digested and organized. Furthermore, it is up to date and includes references to publications through the first of the current year.

With the extensive use of penicillin made by all practitioners of medicine, this book should have frequent perusal and, indeed, careful study. Fortunately, as pointed out in this and other publications, the toxicity of penicillin (and undoubtedly of streptomycin) is low and its effectiveness is high, so that even ill advised use is not often serious. There are dangers, however—dangers of inadequate dosage causing increased resistance of organisms, for instance. Furthermore, toxic reactions do occur and should be recognized promptly. These toxic effects and their treatment are well outlined in Kolmer's book.

In severe and unusual infections, success may depend upon the careful application of the drug. Practical suggestions in relation to specific diseases are to be found clearly outlined in this volume. For instance, Kolmer says that penicillin is preferred to the sulfonamides in the treatment of pneumococcus pneumonia in (1) severely ill cases, especially those with positive blood cultures, (2) cases with initial leukopenia or severe anemia, (3) cases with congestive heart failure, acute or chronic nephritis or cirrhosis of the liver and particularly those with edema or azotemia delaying the excretion of the sulfonamide compounds, (4) cases known to be sensitive to the sulfonamide compounds with serious toxic reactions, and (5) cases failing to show improvement within twenty-four to thirty-six hours under adequate sulfonamide therapy because of natural or acquired resistance of pneumococci to these compounds.

The chapter on subacute bacterial endocarditis should be read by all. It records another landmark in the progress of modern medicine's fight against disease. From a spontaneous recovery of not over 1 per cent, the recovery rate with penicillin treatment has been increased, as recorded in the tabulation of 350 cases so far reported, to about 66.9 per cent recovered. Details of methods of treatment in this disease are again carefully outlined.

In other parts of the book are to be found complete descriptions of laboratory methods for detecting and assaying penicillin, and for determining the activity of penicillin against various organisms, and a discussion of all of the methods of administration of the drug, including methods of prolonging absorption and excretion by additional exhibition of such drugs as sodium p-aminohippurate and benzoic acid.

Chapters are to be found on the application of the drug in surgical conditions and in conditions of the eyes, ears, nose and throat and even in dental and veterinarian medicine.

The section on streptomycin is, of course, less complete but excellent chapters are to be found on its pharmacology, its antimicrobial activity, its methods of administration, and its clinical application insofar as this has been determined. Its effectiveness is established in the treatment of H. influenzae meningitis, acute brucellosis, tularemia, and genito-urinary infections and sepsis due to gram negative bacilli. Its place in the treatment of tuberculosis has not been established, though experimental and clinical evidence of effectiveness has been repeatedly presented.

This book should have wide circulation as it is a useful addition to the Honolulu County Medical Society Library.

S. E. DOOLITTLE, M.D.

Principles and Practice of Obstetrics. By Joseph B. de Lee, M.D., and J. P. Greenhill, M.D. 9th Edition, with 1108 illustrations & 800 figures, 211 in color. Pp. 1011. Price $10.00. W. B. Saunders Company, Philadelphia. 1947.

The ninth edition of this well known and widely utilized standard textbook has undergone extensive revision by the present editor, Dr. Greenhill, with the assistance of other outstanding associates in specialized fields relating to obstetrics.

The scope of the text is wide, including thorough discussions of the physiology of reproduction and development, and the physiology of pregnancy. Chapters on antepartum and postpartum care have been revised. There is a good chapter on analgesia and anesthesia, including discussion of caudal anesthesia and a favor-

able mention of the method of Grantly Dick Read. A chapter on endocrinology is included.

The toxemias of pregnancy are briefly but thoroughly discussed, using the nomenclature of the American Committee on Maternal Health.

The subject of abortion is taken up in considerable detail. However, no mention is made in this section of the work of O. W. and G. V. S. Smith who found that estrogen administration alone stimulates progesterone production in the pregnant woman.

In the section concerning infectious diseases accidental to pregnancy, the statement is made that therapeutic abortion "is justified if German measles develops in a pregnant woman during the first three months of pregnancy." Though there have been reports of a high incidence of serious congenital abnormalities in a high percentage of babies so afflicted, this matter is not as yet clearly defined. It is the opinion of the reviewer that the word *"justified"*—as used in the quotation above—is used advisedly in preference to the word *indicated*.

There is a new chapter on fetal erythroblastosis and the Rh factor. Contracted pelves and the management of labor under such conditions are discussed at length. There is a chapter devoted to the accidents of labor, one to the pathology of the third stage, and another to accidents to the child. In the last chapter it is interesting to note that drugs to initiate respiration in the newborn (such as coramine, metrazol, and alpha-lobeline) are not recommended. There is a new chapter added to this edition on the care of premature babies.

At the beginning of the section on operative obstetrics two maxims are offered. *Primum non nocere* (First of all, do no damage) and *non vi sed arte* (not with force but with skill). It would do all of us good to ponder on these thoughts at frequent intervals. Stress is also placed on the danger of haste in operative obstetrics.

The discussion of extraperitoneal section is too brief. The reviewer believes that there is a considerable middle ground where an extraperitoneal section, combined with chemotherapy and biotherapy, would do away with the necessity for the Porro procedure. The book recommends the use of morphine just before starting a section. This might be dangerous in the hands of slow or inexperienced operators. Local anesthesia is strongly recommended for sections. While having no quarrel that it is the safest, the reviewer still believes there is room for the use of general anesthesia in some instances (such as in the case of a fetal monster). The text scarcely mentions spinal anesthesia for sections except to discard it. Lemmon's fractional or "continuous" spinal method, however, does away with most of the disadvantages, while allowing all the benefits of good surgical relaxation of the abdominal wall, good tone of uterine musculature, an unanesthetized baby, and contraction of the intestine, thus helping to prevent post-operative ileus.

The discussion of thrombosis of leg veins points out its relative rarity. However rare, the presence of a phlebothrombosis presents a very real potential fatality, and diagnosis and treatment should be prompt. No mention is made of vein ligations in this discussion.

This text in general presents a good general coverage of obstetrics and contains an amazing amount of data, the compilation and organization of which is in itself a great credit to the author. Particularly attractive is the logical pattern in which the material is presented and illustrated. One of the most valuable contents is a selected bibliography appended to each important chapter.

COLIN C. MCCORRISTON, M.D.

The Pharmacopoeia of the United States of America. (The United States Pharmacopoeia) XII edition. Pp. 957. Mack Publishing Company, Easton, Penna. April 1947.

The United States Pharmacopoeia has been a potent force for the improvement of medical and pharmacological standards and drugs for more than 125 years. In the last thirty years, it has greatly increased its usefulness because of the battle of its trustees to popularize in the medical and pharmaceutical profession the scientific names of drugs rather than their trade names. This has, of course, resulted in financial savings to patients which are almost incalculable. The book is well-nigh indispensable in the library of any pharmacy or in the office of any physician who uses drugs. The present edition is no exception to the high quality of previous ones, and there is little to be said on that score.

The considerations which lead to the admission of drugs to the Pharmacopoeia, or the deletion of drugs from it, are exceedingly difficult for a practicing physician to understand. This present edition, for example, adds to the list of official drugs calamine lotion, protamine zinc insulin, and purified protein derivative of tuberculin. The first two have been in use for a great many years by a very large proportion of all of the physicians in the world. It is difficult to understand why they have never been included before, particularly calamine lotion, which apparently goes back to prehistoric times in its medical usefulness. Again, some of the deletions are difficult to understand. Bismuth subnitrate is now deleted, as are whiskey and tincture of nux vomica. Bichloride of mercury is no longer an official preparation, and yet it certainly has still a rather wide sphere of usefulness in medicine.

An addition to The Pharmacopoeia, which would make it of incalculably greater usefulness, would be an index of synonyms. In leafing through the book, for example, one finds four preparations of "carbachol," with its chemical synonyn, carbinal choline chloride. It took me half an hour in a very well equipped library to find out what this substance was. It is somewhat better known under the name of "doryl" and might have been more easily identified had that synonym been listed somewhere. Medical literature is strangely lacking in references to its use . . . Perhaps cedar leaf oil is an important substance, but I must say that it has never before come to my attention as a medicament . . . Orange flower water is still carried in The Pharmacopoeia, and I submit that its usefulness, as compared with spirits of camphor, which has been deleted, is scarcely worth mentioning . . . Suramin sodium is another example of a useful substance which is not known at all in the literature under the pharmacopoeial name, and which, if a synonym list were appended, would be made much more accessible to the inquiring physician . . . The listing of capsules and tablets of "triasyn B," which are a mixture of thiamine, riboflavine, and niacin amide, seems peculiar. Certainly far more rational and widely used multi-vitamin preparations than this are available.

H. L. ARNOLD, SR., M.D.

Experiences with Folic Acid. By Tom. D. Spies, M.D. Pp. 110; 33 illustrations. Year Book Publishers, Inc., Chicago, Illinois. Price $3.75. 1947.

In this monograph Dr. Spies presents a timely and detailed account of the work of the past year with the new and important vitamin, folic acid.

There is a comprehensive table showing the steps leading to the isolation and synthesis of folic acid and its related compounds, thus giving the reader an excellent background for what follows. The relationship of folic acid to yeast, the B complex and liver extracts is discussed, and tables and graphs are used to show the relative response in the macrocytic anemias to both the old and new treatments.

Since only the macrocytic anemias are benefited by folic acid, the chapter on the selection of cases is of prime importance. It is obvious from the careful and very critical screening of cases with complete histories, physical examination and laboratory work that only true macrocytic anemias were used in the investigation. This in turn accounts for the uniform and brilliant results obtained.

The 218 persons studied in this group included pernicious anemia, tropical sprue, non-tropical sprue, nutritional macrocytic anemia (pellagra), macrocytic anemia of pregnancy, nutritional leukopenia and cirrhosis of the liver.

Dr. Spies predicted early in his work that the neurological involvement of pernicious anemia might progress under this therapy. This prediction has been verified.

Further review of this excellent work is unnecessary since this volume is a "must" on any physician's reading list.

ERNESTINE K. HAMRE, M.D.

Diseases of the Heart. By Sir Thomas Lewis, C.B.E., F.R.S., M.D., D.Sc., LL.D., F.R.C.P. Fourth ed. Thirty-six line cuts (including electrocardiograms). Pp. 304. Price $5.00. McMillan & Co., Ltd., St. Martin's Street, London, 1946.

The first edition of this work was published in 1933 and soon became recognized as an authoritative source on diseases of the heart. Since then, two revised editions have been issued, the last in 1942. On the frontispiece of this fourth edition, it states, "the text of the third edition has been thoroughly revised and a number of changes have been made to keep the book in close conformity with recent new work and thought. The main alterations are in chapters that deal with cardiac failures."

To make a criticism of the works of one of the early fathers of cardiology would be a sacrilege, and were I reading in 1933 the first edition of this work, which I did, I would read it with rapture and some awe at the profound wisdom and knowledge which Sir Thomas displays in his writings. From a clinical point of view as well as the technical, pathological and physiological viewpoint, in 1933, it was a monumental piece of work.

However, in this present fourth edition of 1946, the clinical viewpoints are still the same much as are the present clinical findings in diseases of the heart. In this edition one finds lacking many of the finer present day concepts in treatment, especially in our knowledge of the use of penicillin, heparin, dicumarol and the newer interpretation of the electrocardiograph, especially in the interpretation of precordial leads. For the student who desires a book on fundamental knowledge of diseases of the heart together with having the writings of one of the greatest cardiologists which England has produced, this is an excellent volume to have in one's library.

F. BERNARD SCHULTZ, M.D.

The Compleat Pediatrician, 5th edition. By Wilburt Davison, M.A., D.Sc., M.D. Pp. approx. 176. Price $4.00. Duke University Press, Durham, North Carolina, 1946.

The latest edition of this well known compendium has been remarkably well brought up to date. Indications and dosage of streptomycin, for instance, have been included under the discussions of all diseases in which it has proven of use.

The reader is warned that the book will be well-nigh unintelligible unless he is willing to spend at least a half hour reading and practicing the Preface and "instructions for using the *Compleat Pediatrician.*"

The volume of well organized and useful information contained in the book makes this time well spent for anyone who deals with children.

F. D. NANCE, M.D.

COUNTY SOCIETY REPORTS

HONOLULU COUNTY MEDICAL SOCIETY

One hundred ninety-eight members and guests, including doctors' wives and children, attended the regular monthly meeting on June 6 at the Mabel Smyth Auditorium, at which four new members were welcomed: Drs. Grover H. Batten, John Bell, Herbert Hata, and Isami Umaki.

It was agreed to waive the 1946 special assessments of $75, as recommended by the Board of Governors, of the following six doctors: Drs. Alfred Craig, E. K. S. Lau, E. A. Stephens, Clarence Sugihara, J. Wong, and G. H. Batten.

It was also agreed not to drop from membership the six members whose 1946 special assessment remains unpaid, it being felt that breaking up the organization because of such a small percentage of delinquency in paying this assessment would do more harm than good. It was announced that a letter had been sent to each of these men explaining the purposes of the assessment.

Dr. Clarence E. Fronk gave an interesting talk on his recent experiences in big game hunting in East Africa and showed some of his lantern slides.

S. L. YEE, M.D.
Recording Secretary.

* * *

KAUAI COUNTY MEDICAL SOCIETY

Dr. Donald Depp, newly elected president of the society, called the meeting to order at 7:00 p.m. on May 14, 1947, at the Wilcox Memorial Hospital, Lihue, Kaui, T. H. Those present were: Doctors Wallis, Boyden, Toney, Depp, Liu, Masunaga, Fujii, Wade, Brennecke, Cockett. Dr. Young, resident, was also present.

Dr. Boyden called the attention of the society to information from the Hawaii Health Messenger bulletin that the water supply at the ports of Nawiliwili and Port Allen are not fit for human consumption, because all ships are prohibited from drawing water at these ports by the United States Health Department.

Dr. Fujii recommended that the local meat source supply should be investigated by the Board of Health. Dr. Horton, Public Health Officer for the Island of Kauai who was present, stated that the Board of Health, T. H., is in the process of making a study of the water supply on the island, and all water that does not meet the standards of purification is to be purified by the County or Plantations just as soon as laws can be passed in the next legislature. The local meat supply on Kauai is not inspected. The slaughter houses where cattle or pigs are slaughtered are inspected by the Board of Health.

Dr. Boyden reported some favorable comments with regard to the Territorial Medical Association Convention which was held here in Lihue, Kauai, T. H. A letter of appreciation from Dr. Harry Arnold, Jr., was read. A personal letter of deprecation from Dr. Gaspar to Dr. Fujii was also read by all members and it was recommended and approved by all members that the Secretary write a letter in answer to Dr. Gaspar's complaints, to Dr. Faus and Dr. Gaspar.

A letter written by Frances Burns, plus an anonymous note were brought to the attention of the members by Dr. Boyden, who received these notes from the Parish House following the Convention concerning recommendation for the solution of a Medical Health Plan for the Territory of Hawaii; and it was recommended that these two notes be sent to Dr. Faus, president-elect of the Territorial Medical Association.

A copy of the Constitution of the Kauai County Medical Society was presented and read by the President, who recommended that sufficient copies be made (about 50) and each member be given a copy of the Constitution.

Dues: The question of dues was brought up and the same consist of $25.00 Territorial Medical Association; $2.00 HAWAII MEDICAL JOURNAL; $10.00 Kauai County Medical Society. Total of $37.00. Dues by all members of the Wilcox Memorial Hospital staff will also include an additional $10.00 library fee.

Kauai Medical Service Association plan was brought up for discussion and it was moved and passed that each doctor, by the next meeting, present his operation costs per patient, and per visit, in order that an adequate plan would be worked out for H.S.P.A. by the first of December, 1947.

PATRICK M. COCKETT, M.D.
Secretary.

HAWAII COUNTY MEDICAL SOCIETY

A special dinner meeting of the Hawaii County Medical Society was called to order by President S. Mizuire at the Hilo Country Club on May 10, 1947.

President Mizuire introduced the guest speaker, Dr. Cyrus C. Sturgis of Ann Arbor, who spoke on "The Cause and the Treatment of the More Important Types of Anemias."

The lecture was enjoyed by all present and was followed by a good deal of questions and discussions.

The 261st regular meeting of the Hawaii County Medical Society was called to order at 7:30 p.m., May 8, 1947 in the staff room of the Hilo Memorial Hospital by President S. Mizuire.

Doctors present were C. B. Brown, M. H. Chang, L. Fernandez, R. Hata, H. D. Ireland, S. Kasamoto, T. Kutsunai, W. Loo, S. Mizuire, A. Orenstein, T. Oto, H. M. Patterson, L. L. Sexton, H. M. Sexton, G. Tomoguchi, R. P. Wippermann, T. Yoshina, and T. S. Strathairn.

Mrs. Christians, of the Department of Public Welfare, gave a very interesting and informative talk on the workings of her department, especially with regard to its relation to the Medical Profession. An open discussion followed. The feeling was expressed that Mrs. Christians was doing her best to obtain a closer and smoother relationship between the D.P.W. and the Medical Profession and that the members should give her the support she requested.

None of the delegates had been able to attend the Territorial meeting so the secretary gave a brief summary of it.

Payment of travel and hotel accommodations for Dr. and Mrs. C. C. Sturgis was approved.

Correspondence from the HMSA, Dr. Schultz, and the Board of Health was read. No action was taken except to approve of Dr. Schultz's lecture for the June 5 meeting.

Dr. T. S. Strathairn was voted unanimously into the Society.

The proposed increase in yearly dues to forty dollars ($40.00) was passed unanimously.

Some discussion followed concerning the Medical Economics Program. Support was urged of each member in backing the program.

There being no further business the meeting was adjourned at 10 p.m.

HAROLD M. SEXTON, M.D.
Secretary

* * *

MAUI COUNTY MEDICAL SOCIETY

The regular meeting of the Maui County Medical Society was held in Wailuku on March 29, 1947; Drs. Underwood, Rothrock, Tofukuji, H. Kushi, E. Kushi, St. Sure, Jr., Kanda, Fleming, Izumi, Anderson and Sanders (president) were in attendance.

Dr. Kushi reported that a site opposite Baldwin High School had been chosen by the Board of Supervisors for a central hospital.

Dr. Anderson reported as follows for the Committee on Fees: that the H.M.S.A. fee schedule for Veterans, dated September 1, 1946, would be adhered to as minimal charges, with the following exceptions: Obstetrical cases minimum, $80 for prenatal, delivery, 1 postnatal visit; minimum for office calls, $3, house calls $5, night calls $7.50. Minimum fee for tonsillectomy, $35. Injected drugs: minimal office call fee plus cost of drug, except for typhoid vaccine, for which a $1 fee was merely suggested.

J. SANDERS, M.D.
President.

NOTES AND NEWS

PERSONALS

Dr. Henry C. Gotshalk, of Honolulu, has returned from an extended trip on the mainland, during which time he successfully completed the examinations of the American Board of Internal Medicine and was certified by that Board.

Dr. Tetsui Watanabe, of Honolulu, has opened his offices for the practice of radiology at 1914 South King Street. Dr. Watanabe is a graduate of Rush Medical College, Chicago, 1939, following which he interned in Joliet, Illinois. His training in radiology was received at the University of Chicago in Billings Hospital. He served as Junior Instructor in Radiology at the University of Michigan in Ann Arbor. From 1944 to 1947 he was radiologist at the Silver Cross Hospital, Joliet, Illinois.

Dr. Patrick J. Lynam has opened his offices in the new King Kalakaua Building, where he is specializing in otolaryngology. Dr. Lynam is a Diplomate of the American Board of Otolaryngology and a Fellow of the American Academy of Otolaryngology and Ophthalmology. He is associated with Dr. Harold F. Moffat, of Honolulu, who specializes in ophthalmology and is likewise a Diplomate of his specialty board. Dr. Moffatt was formerly with The Clinic.

Dr. Richard S. Dodge, of Boston, Massachusetts, has become associated with Dr. Nelson Hatt in the practice of orthopedics. Dr. Dodge was educated at Dartmouth University and the Long Island College of Medicine, from which he was graduated in 1940. Following four years' service, he was discharged from the Army as a Major, having served in Alaska and Cuba, and at Cushing General Hospital, Mass., under Dr. Hatt; he then served as orthopedic resident at the Massachusetts General Hospital and later at the Children's Hospital, Boston, as a Junior Resident.

Dr. Marie K. Faus recently spent several months on the coast and included visits to Canada on her trip.

Dr. F. Bernard Schultz, of Honolulu, was installed as Department Surgeon of the Hawaii Chapter of the Veterans of Foreign Wars, at their annual encampment in Honolulu in June.

Dr. Teruo Yoshina has moved from Hilo to Honolulu, where he has opened his offices in the Victoria Medical Building for the practice of pediatrics. Dr. Yoshina has specialized in pediatrics since his graduation from the University of California in 1933, including two years of pediatric training at the University of California Hospital and Bellevue Hospital in New York. He was certified by the American Board of Pediatrics in 1946.

Dr. Phillip Arthur, of Honolulu, has returned from a trip East, where he successfully completed the examinations and has been certified by the American Board of Radiology. He attended meetings of the American College of Radiology as well as the AMA meeting.

Dr. and Mrs. Colin McCorriston are the parents of a daughter, Catherine Anne, born on May 17. They have two sons in addition to their new daughter.

Dr. and Mrs. Laurence M. Wiig became the parents of their first daughter, Linda Jeanne, born in the Queen's Hospital on June 16. They also have two sons.

Dr. Nils P. Larsen returned recently from the mainland where he attended the Centennial meeting of the AMA.

Mrs. Boyd Hill, librarian of the County Medical Library, recently returned from a mainland trip, during which she attended the meeting of the American Medical Library Association.

Dr. Theodore Tomita, of Honolulu, has become associated with Dr. Min Hin Li, in the practice of medicine and surgery. Dr. Tomita, a native of Honolulu, has just been discharged from the Army, after three years. He received his M.D. at the University of Michigan in 1943 and interned in the St. Mary's Hospital in Detroit.

Dr. Homer M. Izumi and Dr. Satoru Nishijima, of Honolulu, have moved from their previous offices to the Victoria Medical Building, at Victoria and Kinau Streets, where they maintain separate offices.

Dr. Frank C. Spencer, of Honolulu, has returned to specialize in obstetrics and gynecology after nearly one year of graduate training in New York and at the Margaret Hague Maternity Hospital in Jersey City, and a month's course in caudal anesthesia with Dr. R. A. Hingson, at the University of Tennessee. He has completed the examinations of the American Board of Obstetrics and Gynecology.

Dr. and Mrs. Gilbert M. Halpern, of Honolulu, are vacationing on the mainland, where they will visit in California and New York.

Dr. Harry L. Arnold, Jr. was recently honored by election to the American Dermatological

Association, at the annual meeting of that organization on June 4, 1947.

MAUI NEWS

Dr. Guy S. Haywood, of Forsythe, Montana, has joined the surgical staff of the Puunene Hospital (Hawaiian Commercial and Sugar Company). He is a graduate of Northwestern University Medical School and served a three year fellowship in general surgery at the Mayo Clinic, Rochester, Minnesota. Following this he served for three years in the Army Medical Corps, from which he is now on terminal leave.

Dr. Robert F. Cole, of Cleveland, Ohio, who is a graduate of Columbia University College of Physicians and Surgeons, has joined the staff of the Paia Hospital (Maui Agricultural Company). Dr. Cole saw considerable active duty with the Army Medical Corps in the Pacific area and served in the Army for six years prior to his discharge as a Lieutenant Colonel in December, 1946.

Dr. L. S. Rockett, of Ardmore, Oklahoma, has become associated with the Wailuku Sugar Company, Wailuku and has been appointed government physician for the Wailuku District (Territorial Board of Health). Dr. Rockett was graduated from the University of Oklahoma, interned in Des Moines, Iowa and has been recently discharged from the Navy, after serving for a considerable period with it in this area.

HONOLULU SURGICAL ASSOCIATION

This society held a meeting in the Mabel Smyth Building June 23. The program was presented by the staff of the U. S. Naval Hospital, Aiea Heights and included excellent papers on the value of vagotomy in treatment of peptic ulcer; traumatic rupture of the mesentery of Meckel's diverticulum; thrombocytopenic purpura and acute pancreatic necrosis.

WILLIAM DEWEY BALFOUR
1898 - 1947

The deep and sudden sense of loss occasioned by the death of William Dewey Balfour is difficult to rationalize. Bill was too young in years and spirit, too productive, too vital, and too attached to the hearts of those who were fond of him. His life in all respects was exemplary. He died on April 13, 1947, at 48 years of age.

William Balfour was born in Adams County, Illinois, May 8, 1898. Subsequently he moved to Kansas, where his early schooling was acquired. In 1917, he joined the First Kansas Cavalry unit and was transferred to a European post, but was later assigned military police duty in France and Central Europe. In this capacity he served fourteen months abroad. Upon returning to Kansas after World War I, Bill attended Washburn College, Topeka, Kansas, being graduated with a B.S. degree in 1923.

Formal medical schooling was obtained at the Washington University School of Medicine, St. Louis, Missouri, from which he was graduated in 1927. On June 7, 1927, Bill married Miss Mildred Schnitzer. Immediately upon graduation Bill came to Kauai to be assistant to Dr. J. M. Kuhns, and returned one year later to serve a twelve months' service in pathology at Barnes Hospital, St. Louis, Missouri. From Barnes Hospital, Bill spent thirteen months in surgery and in the diagnostic clinic of Henry Ford Hospital in Detroit. Once again Bill returned to Kauai as assistant to Dr. Kuhns. He later practiced independently in plantation and private work until 1940. Between 1940 and 1942 he was plantation physician for the Hawaiian Agricultural and Hutchinson Sugar Companies on the Big Island. In August of 1942 Bill came to the Valley Isle in charge of the Medical Department of the Wailuku Sugar Co., where he remained in private and plantation practice until his death.

His fraternal and civic associations were numerous and active. Bill was a Shriner, a Rotarian, an American Legionnaire, and a member of Phi Rho Sigma medical fraternity, the HSPA physician's association, and the Wailuku Union Church. When time permitted, Bill was an ardent golfer. He was president-elect of the Maui County Medical Society by tradition, an office which, with his keen interest in the affairs of this society, would have been admirably managed. By the family of William Balfour, the community of Maui, the Maui County Medical Society, and the Territorial Medical Association, Bill's loss will be deeply felt.

Genuine, sincere, sympathy is extended Bill's beloved wife, Mildred Schnitzer Balfour, and his two fine sons, William Dewey Balfour, Jr., and John Frederick Balfour.

Emory H. Anderson, M.D.

JAMES R. JUDD
1876-1947

Dr. James R. Judd was born in Honolulu on May 20, 1876, and died in San Francisco on June 1, 1947.

He was the grandson of the famed Dr. Gerrit P. Judd, medical missionary, who came to Hawaii around the Horn in 1828 and who later, in addition to his medical activities, played an important role as advisor to the King and formulator of government policies. Dr. Judd's father, Albert Francis Judd, was chief justice of the Territory for twenty-six years; and his brother, Lawrence, was its governor from 1929 to 1934. Other descendants of the original Dr. Judd have played an active part in various phases of the development of Hawaii and will no doubt continue to do so for generations to come.

Dr. James R. Judd graduated from Punahou School in 1893; took his A.B. degree from Yale in 1897; and was graduated in medicine from Columbia University in 1901. Following this, he spent two years at New York Hospital training for surgery before returning to Honolulu in 1903 to enter private practice.

Dr. Judd, on his return to Hawaii, found a virgin field for surgery. He had been inspired by the surgical great, such as Bull, Horsley, Blake and others. It was the beginning of a new era in surgery when aseptic technic, new operative procedures and wider application of anesthesia permitted the surgeon to bring about miracles in comparison to what had gone before. With an ambition to follow in the footsteps of his forefathers in contributing to the welfare of Hawaii, with keen surgical judgment and operative skill and with a deep respect for his ethical relations with his colleagues, it is easy to see how Dr. Judd soon became Hawaii's outstanding surgeon. He quickly fell heir to many knotty surgical problems and the success which followed his efforts soon gained for him the respect and admiration of his associates and the undying gratitude of his patients.

Dr. Judd was the first local surgeon to wear rubber gloves and was the first to introduce modern surgical technic in operative procedures. He was the first in Hawaii to perform a cholecystectomy, prostatectomy, thyroidectomy, gastric resection and many other major operations.

He was an inspiring and willing teacher and nothing delighted him so much as to have the operating table surrounded by his colleagues while he demonstrated to them the various steps of some new or difficult operative procedure. As a clinician, he was a close observer and emphasized the use of our God-given senses in arriving at a diagnosis before resorting to the short cuts from the laboratory so frequently depended upon by more recent graduates.

Dr. Judd was always an advocate of early ambulation following operation, and years before the present enthusiasm which is now sweeping the country, was aware of its advantages. He was also a great believer in the therapeutic value of Hawaiian sunshine and fresh air and treated all infected wounds to increasing doses of sunshine, a procedure that merits wider use. In his relationship to his patients, he was always conservative and never advised operative intervention unless he was morally sure that benefit could be expected. The unsound advice of the overenthusiastic or inexperienced surgeon was met by the question, "Under similar circumstances, would you, as a patient, be willing to be subjected to operation?"

Dr. Judd was fond of young people and felt that their vigor, enthusiasm and faith in the future added much to his outlook on life, while he, in turn, gave them wise counsel borne of experience. Particularly was this true of interns and budding young surgeons, to whom he was always so willing to lend a helping hand.

He was a peace-loving individual who would go to great lengths to settle a misunderstanding amicably, and particularly during the recent war, when hospitals were overcrowded, doctors and nurses too few and much overworked, his advice, suggestions and actions did much to preserve harmony and keep medical care working efficiently. While striving for peace by appeasement, he never did so at the expense of honesty, integrity or fairness to all concerned.

In three wars, Dr. Judd gave unstintingly

of his services to our country. He was a surgical assistant with the American Red Cross in the Spanish-American War. In 1915, he and Mrs. Judd went to France and there worked side by side caring for the wounded first at Neuilly and later at Juilly where he was surgeon in chief of the hospital. In July, 1921, the French Republic, in recognition of his outstanding service, decorated him with the Legion of Honor. Preceding, during and following the blitz on Pearl Harbor and throughout World War II, Dr. Judd worked unceasingly. Even though he had reached the age in life when most men retire, and certainly he was entitled to a period of rest from long years of service to humanity; he doggedly carried on because he wanted to contribute his all to the cause. He often said that he would like to be with the boys at the front and only his age prevented his being there.

Dr. and Mrs. Judd have long been known as true exponents of Hawaiian hospitality and their home has been the scene of many social gatherings that will be long remembered. This was particularly true during the recent war when many a homesick or emotionally disturbed individual in various branches of the military service received that personal touch of home environment and interest that does so much to pick up sagging spirits when so far away from loved ones.

Much more could be written about Dr. Judd, for his contributions to the Territory have been many. He has left his imprint on the memory of many, as a true and trusted friend, as a physician and skilful surgeon, as a genial host, as a defender of all that was good, as a scourge to the untruthful, as a loyal citizen and believer in our democracy, freedom and the American way of life —but space precludes and words seem so inadequate. Better let us strive to emulate his actions, carry out his teachings, and by so doing make Hawaii a better place in which to live for ourselves and for subsequent generations.

J. E. Strode, M.D.

COLLEGE OF AMERICAN PATHOLOGISTS FOUNDED

The first regional scientific meeting of the newly organized College of American Pathologists was held in Indianapolis last April 7. Over 125 pathologists attended the meeting, which was devoted to hematology. Dr. Frank Hartman of the Henry Ford Hospital in Detroit is the president; Dr. Granville Bennett of the University of Illinois is the vice-president; and Tracy B. Mallory of Massachusetts General Hospital is the secretary-treasurer.

CHANGE IN REQUIREMENTS FOR CERTIFICATION IN ORTHOPEDIC SURGERY

A candidate for certification by the American Board of Orthopedic Surgery applying after January 1, 1951, will be required to have spent an additional year in an approved surgical residency (general, orthopedic, or other, apparently) subsequent to the completion of his internship. An explanatory note accompanying this announcement indicates that this year is to *precede* special training in orthopedic surgery.

Details may be obtained from the Board's secretary, Dr. Francis M. McKeever, 1135 West 6th St., Los Angeles 14, California.

REPRINTS TO COLORADO RHEUMATIC FEVER LIBRARY

The Colorado Rheumatic Fever Library, recently established at the University of Colorado School of Medicine, proposes to collect an exhaustive bibliography on rheumatic fever, so as to make possible the rendering to rheumatic fever workers of a complete photostatic and abstract reference service on this disease. All physicians are urged to send reprints of their own or others' articles on rheumatic fever to this collection for permanent filing. The address is 4200 East 9th Avenue, Denver 7, Colorado.

CALLING ATTENTION TO

Items of possible interest to friends of Chauncey D. Leake

April, 1947

1. Spring Fever Books: On the moralizing front P. Wylie offers hectic *Essay on Morals* (Rinehart, N. Y., 204 pp., $2.50), H. C. Link fuzzily dogmatizes on *The Rediscovery of Morals* (Dutton, N. Y., 223 pp., $2.50), L. duNouy pulls a mystic Alexis Carrel in *Human Destiny* (Longmans, N. Y., 289 pp., $3.50), and I. Edman pleasantly describes a *Philosopher's Quest* (Viking, N. Y., 275 pp., $3). B. M. Duncum's *Development of Inhalation Anesthesia* is the British story, with much on apparatus (Oxford, 640 pp., 35s). A. R. McIntyre offers important *Curare: Its History, Nature,*

and Clinical Use (Univ. Chicago, 220 pp., '47, $5). D. Rynin edits A. B. Johnson's noteworthy *Treatise on Language* (Univ. California, '47, 456 pp., $5). R. E. Coker edits 14 notes on Southern problems, including D. E. Lilienthal's *Moral Responsibility of Research* (Univ. North Carolina, '46, 229 pp., $3). J. P. Greenstein offers *Biochemistry of Cancer* (Academic Press, N. Y., '47, 396 pp., $7.80). H. Selye's *Encyclopedia of Endocrinology* comes along with Vol. 7 on *Ovarian Tumors* (Richardson, Montreal, '46, 427 pp., $5). J. M. D. Olmstead writes another pleasant biography in *Charles-Edouard Brown-Sequard: 19th Century Neurologist* (Johns Hopkins, Balt., '46, 253 pp., $3). B. M. Bernheim discusses *A Surgeon's Domain* (Norton, N. Y., 253 pp., $3). H. B. Friedgood describes *Endocrine Function of the Hypophysis* (Oxford Press, N. Y., '46, 237 pp., $4.50). D. J. Leithauser discusses *Early Ambulation and Related Procedures in Surgical Management* (C. C. Thomas, Springfield, Ill., '46, 241 pp., $4.50). J. E. Moore offers *Penicillin in Syphilis* (C. C. Thomas, Springfield, Ill., '47, 329 pp., $5). M. Pijoan and C. H. Yaeger issue *Commonly Used Drugs* (C. C. Thomas, Springfield, Ill., '47, 198 pp., $3.75). T. D. Spies describes *Experiences with Folic Acid* (Yearbook, Chicago, '47, 110 pp., $3.75). A. A. F. Peel offers *Diseases of the Heart and Circulation* (Oxford Press, N. Y., '47, 419 pp., $9.75). H. T. Pledge summarizes *Science Since 1500* (Philosophical Library, N. Y., '47, $5).

2. Cytology: E. Undritz and E. Rothlin have new evidence supporting J. H. Wright's theory (*Virchow's Arch. Path. Anat.* 186:55 '06) of platelet origin from bone marrow megacaryocytes (*Helv. Med. Acta* 13:595 '46). I. Wallgren describes pale granular substance of cell and relation to structure (*Acta Path. Microbiol. Scand.* 23:415 '46). G. I. Roskin further notes cytologic changes in malignant tumors under action of schizotrypanum endotoxin (*Bull. Exp. Biol. Med. U. S. S. R.* 22:18 '46). C. Brun & Co. study hydrodynamics of semipermeable tubes in relation to glomerular kidney function and find contraction of vas efferens must occur to account for clearance findings (*Acta Physiol. Scand.* 12:321 '46). S. H. Wadja proposes possible hemopoiesis from striated muscle cells (*Nature* 159:254, Feb. 22, '47).

3. Neurology: J. W. Kirklin & Co. discuss causalgia (*Surg.* 21:321 '47). M. A. Kennard reviews autonomic interrelations with somatic nervous system (*Psychosomat. Med.* 9:29 '47). W. Ashby suggests that disturbances in distribution pattern of carbonic anhydrase in brain may accompany mental disorder (*J. Nerv. Ment. Dis.* 105:107 '47). F. Feldman & Co. describe ambulatory electroshock therapy (*Ibid* 171). L. Orbeli reviews effects of extracortical factors of CNS function (*Am. Rev. Sov. Med.* 4:206 '47). M. L. Barr discusses basis of heart pain (*Rev. Canad. Biol.* 5:602 '46). O. A. M. Wyss & Co. localize medullary inspiratory center sensitive to afferent vagal stimuli (*Helv. Physiol. Pharmacol. Acta* 4:495 '46). W. J. O'Connor discusses control of urinary secretion by pituitary pars nervosa (*Biol. Rev. Cambr. Philosoph. Soc.* 22:30 '47). Note excellent symposia on working capacity and on fitness for work (*Occupational Med.* 2:531 '46).

4. Therapeutic Notes: R. Bessiere and H. P. Gerard report promise in paresis with Na p-hydroxy m-aminophenyl arsenite (*Presse Med.* 12:130, Feb. 22 '47). E. Anderson and J. A. Long find insulin secretion stimulated by high glucose levels, and that A. P. growth hormone inhibits insulin secretion (*Endocrinol.* 40:92 '47). G. K. Moe & Co. report clinical usefulness of tetraethyl ammonium bromide (10 mgms/Kg IM) by blockade of autonomic ganglia (*Am. J. Med. Sci.* 213:315 '47). H. L. Segal & Co. further discuss value and safety of anion exchange resin (Polyamine formaldehyde resin) in management of peptic ulcer (*Gastroenterol.* 8:191 '47). M. Nickerson and L. S. Goodman note possibility of "dibenamine" (N,N-dibenzyl-B-chloroethylamine) as an adrenergic blocking agent (*J. Pharmacol. Exp. Therap.* 89:167 '47). W. H. Feinstone & Co. note possible value of 2-butoxy-5-aminopyridine in tuberculosis (*Ibid* p. 153). G. A. Levy offers thorough study of arsine poisoning (*Quart. J. Exp. Physiol.* 34:47 '47). Our A. Ruskin and G. M. Decherd describe use of thiamine (HCl (300 mgms IV) as useful agent to measure circulation time from arm to tongue (*Am. J. Med. Sci.* 213:337 '47).

May, 1947

1. Texas City Disaster: Experience demonstrated successful application to civilian casualties of escheloned military medical principles, especially through effective co-operative team-work of skilled specialists in specialty organized hospital. General points: First-aid with rescue squads; preliminary dressing with general practitioners who directed evacuation to specialty organized hospital; rapid diagnosis and sorting by specialty teams; careful surgery, open drainage, liberal use of plasma, whole blood, penicillin, tetanus and gas-gangrene antitoxin, fluid balance control, careful anesthesia, and detailed records. Now planning rehabilitation clinic (See H. A. Rusk, Rehabilitation, *Ann. Int. Med.* 26:386 '47). Staff put two emergency teams into field within 30 minutes after explosion, received 408 casualties, lost 16 (chiefly severe cranial injuries), transferred 90 to convalescence within 48 hours, discharged 120 within 6 days, and handled rest in routine. With large pool of 76 residents, 320 medical students and 250 nursing students, it was a text-book demonstration. Splendid aid from Red Cross, Army, Navy, American Legion, Boy Scouts, nurse groups, Dallas Blood Bank, local merchants. Blast equal to atom bomb without radioactivity. Full account will appear in *Texas Reports on Biology and Medicine.*

2. Books: Notable result of G. Sarton's influence is J. B. Conant's Terry Lectures *On Understanding Science: An Historical Approach* (Yale Press, New Haven, '47, 160 pp., $2). How about considering ethical significance of science? With usual British bias and much of value on apparatus, B. M. Duncum offers *The Development of Inhalation Anesthesia with Special Reference to the Years 1846-1900* (Oxford Press, '47, 656 pp., 35s). Interesting title is B. Evans' *The Natural History of Nonsense* (Knopf, N. Y., '46, 294 pp., $3). G. B. Webb and D. Powell offer *Henry Sewell Physiologist and Physician* (Johns Hopkins, Balt., '46, 200 pp., $2.75). A. B. Luckhardt recommends E. Andrews' *History of Scientific English: The Story of Its Evolution Based on a Study of Biomedical Terminology* (R. R. Smith, N. Y., '47, 342 pp., $7.50). N. Y. Academy of Medicine Committee reports on *Medicine in the Changing Order* (Commonwealth, N. Y., '47, 258 pp., $2). J. Samuels writes *Die Hormonversorgung des Foetus* (Brill, Leiden, '47, 320 pp., $3.50). G. Pincus edits *Recent Progress in Hormone Research: Proceedings of Laurentian Conference* (Academic Press, N. Y., '47, 406 pp., $7.50). A Szent-Gyorgyi offers *Chemistry of Mus-*

cular Contraction (Academic, N. Y., '47, 150 pp., $3.50). M. D. Kamen writes *Radioactive Tracers in Biology* (Academic, N. Y., '47, 300 pp., $5.50). A. N. Whitehead returns in *Essays in Science and Philosophy* (Philosophical Library, N. Y., '47, 300 pp., $4.75). E. J. Lund summarizes *Bioelectric Fields and Growth* (Univ. Texas Press, Austin, '47, 400 pp., $6). R. S. Stevenson revives *Morell Mackenzie: The Story of a Victorian Tragedy* (Schuman, N. Y., '47, 312 pp., $5). H. J. Muller, C. C. Little and L. H. Snyder collaborate on *Genetics, Medicine, and Man* (Cornell Press, Ithaca, '47, 171 pp., $2.25). Neat is A. Fleming's *Chemotherapy Yesterday, Today and Tomorrow* (MacMillan, N. Y., '47, 39 pp., 50c). F. Y. Wiselogle edits 2 vol. *Survey of Antimalarial Drugs 1941-1945* (Edwards, Ann Arbor, '47, 2457 pp., $30). W. H. S. Jones offers *Philosophy and Medicine in Ancient Greece* (Johns Hopkins, Balt., '47, 100 pp., $2). M. H. Fisch issues fine review of E. J. and L. Edelstein's *Asclepius: A Collection and Interpretation of the Testimonies* (Johns Hopkins, Balt., '45, 2 vols., $7.50) and adds much (*Bull. Hist. Med.* 20:712 '46). M. F. A. Montagu edits *Studies and Essays in the History of Science and Learning offered in homage to George Sarton* (Schuman, N. Y., '47, 596 pp., $1).

3. Also Noteworthy: W. A. Hagan, H. R. Cox, W. H. Feldman, I. F. Huddleson, H. N. Johnson, R. A. Kelser, J. V. Klauder, K. F. Meyer, C. D. Stein, W. H. Wright offer symposium on relation of diseases in lower animals to human welfare (*Ann. N. Y. Acad. Sci.* 48:351 '47). E. J. Cohn, J. Stokes, G. R. Minot and C. A. Janeway offer symposium on therapeutic blood fractions (*Ann. Int. Med.* 26:341 '47). T. O. Gray, J. A. Hobson, G. Ostlere, A. Gillis give symposium on tubocurarine and curare (*Brit. Med. J.* 1:444, Apr. 5, '47). J. Field well discusses cell respiration and fermentation in relation to narcosis (*Anesthesiology* 8:127 '47). T. D. Fontaine & Co. report on tomatin, antibiotic from tomato possibly useful vs fungi (*Ann. Biochem.* 12:395 '47). H. Lowenbach and M. H. Greenhill think lactic acid is common effective agent in aiding depressive states (*J. Nerv. Ment. Dis.* 105:343 '47). E. R. Hart recommends salicylamide as safe effective analgesic (*J. Pharmacol.* 89:205 '47). D. F. Marsh and A. J. Davis compare antihistaminic cmpds. (*Ibid* 234). So does R. L. Mayer (*Ann. Allergy* 5:113 '47). G. Schloss suggests renal tubules produce renin (*Helv. Med. Acta* 14:22 '47). L. Claesson and N. Hillarp show formation of estrogenic hormones from cholesterol in ovaries (*Acta Physiol. Scand.* 13:113 '47). Our C. M. Pomerat, E. H. Frieden and E. Yeager report further on reticuloendothelial immune sera in blocking doses (*J. Infect. Dis.* 80:154 '47).

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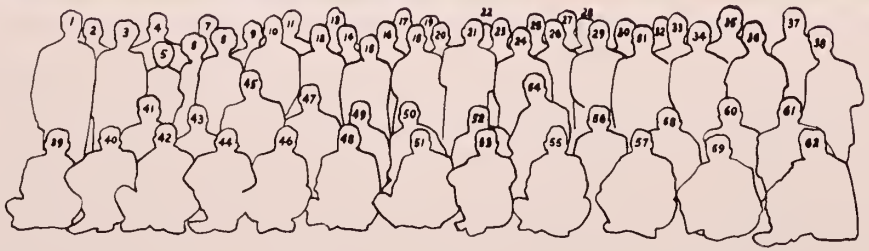
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Not in picture: Allison, Amlin G. A. Batten, Boog, Brennecke, Culpepper, K. K. Fujii, T. Fujii, Gaspar, Hamre, T. Hata, Hewell, Holmes, Horton, Kuninobu, Kushi, Marks, Marshall, Patterson, L. G. Phillips, Richert, Sakimoto, Stitt, Takaki, Wade, Walck, Wilkinson, Yamauchi, Young.

Fifty-Seventh Annual Meeting

Hawaii Territorial Medical Association

LIHUE PARISH HOUSE, LIHUE, KAUAI MAY 1-4, 1947

The fifty-seventh annual meeting of the Hawaii Territorial Medical Association was opened in the Lihue Parish House with a joint meeting of the House of Delegates and membership. The following program was presented:

SCIENTIFIC PROGRAM

Acute Appendicitis in Measles by Rogers Lee Hill, M.D.
Management of the Allergic Patient by Tell Nelson, M.D.
Familial Erythroblastic Anemia (Cooley's Anemia): Report of a case by Edward F. Slaten, M.D.
Rhinoscleroma: Report of Two Cases Occurring in Hawaii by H. E. Crawford, M.D. and M. Gerundo, Ph.D., M.D.
Thirty Years' Experience with Coronary Artery Disease by Cyrus C. Sturgis, M.D. (by special invitation).
Kodachrome Movie: Diagnosis of Leprosy by Harry L. Arnold, Jr., M.D.
Therapeutic Program in Leprosy by Norman R. Sloan, M.D.
Kodachrome Movie: Resection of the Lung for Tuberculosis by Paul W. Gebauer, M.D.
Tumors Within or Adjacent to the Mediastinum by Joseph E. Strode, M.D.
Modern Concepts in the Diagnosis and Treatment of Fungous Infections by Harold M. Johnson, M.D.
The Mode of Action of Sulfonamides Upon Enteric Bacteria by Michele Gerundo, Ph.D., M.D.
Kodachrome Movies: Rehabilitation of the Cerebral Palsied. Produced by the National Society for Crippled Children and Adults. Commentary by R. Nelson Hatt. M.D.

MEETINGS

Council—Thursday evening, dinner meeting at the Lihue Hotel.
House of Delegates—Friday afternoon, 2:00, Lihue Parish House.
House of Delegates—Saturday luncheon, Yacht Club.

Other meetings held in conjunction with the annual meeting were:

Advisory Committee to Bureau of Maternal and Child Health. Thursday morning, Wilcox Hospital Library.
Advisory Committee to Bureau of Crippled Children, Thursday afternoon, Wilcox Hospital Library.
Round Table Meeting. Saturday morning, Lihue Parish House: *Medical Economics.*

SOCIAL PROGRAM

Dinner—Saturday evening honoring Dr. Joseph E. Strode, home of Dr. and Mrs. Jay M. Kuhns.
Golf—Sunday morning, Wailua Golf Club; K. K. Fujii, M.D., in charge.
Picnic—Sunday morning at the Valley House.
Trip to Kokee—Friday morning.
Trip to Hanalei—Saturday morning.

NOTES

Scientific papers presented will be published in the HAWAII MEDICAL JOURNAL.

Minutes of meetings, reports, discussions at the round table, and the President's address follow:

PRESIDENT'S ADDRESS

JAY M. KUHNS, M.D.

Ladies and Gentlemen:

It is my privilege to extend to you an official welcome to Kauai. It is an honor to be host to the Hawaii Territorial Medical Association and we hope you will thoroughly enjoy yourselves.

The annual reports from the various officers and committees present a complete picture of the year's activities. Therefore, I do not feel compelled to speak at length of what has been accomplished during the year.

You have done me a great honor in electing me President of the Association. However, I could never have carried this heavy responsibility without the willing and able assistance of Dr. Bob Faus, upon whom I have depended throughout the year. He has done all that was asked of him—and more. There is no doubt in anyone's mind that Dr. Faus will carry on in a most capable fashion as our President in the year to come.

It was indeed a happy inspiration on the part of Dr. Fennel to propose and carry through the change in our organization whereby we now have a President Elect, and our Secretary and Treasurer serve for three years.

The greatest development of the year just completed has been the awakening of our members to their responsibilities in relation to the public—not merely to provide the necessary care for the sick, but to assume their proper share in providing plans for better medical care for everyone and exposing the fallacies in certain plans which have been promoted by other groups. To the Medical Economics Committee, headed by Dr. F. J. Pinkerton, we all owe more than we can repay. The men of this committee have given unstintingly of their time and effort. They have made us aware of how remiss we have been in the field of public relations.

Now that we think we have defeated the Compulsory Sickness Tax bills in this session of the Legislature, let us not sink back into our previous condition in which we made no great effort to improve our public relations. The Medical Economics Committee has developed a long-range program to be considered during this present annual meeting. The great majority of the doctors in the Territory have cooperated well during the present emergency. Now it is up to every one of us to seriously consider the problems presented in the field of medical economics and to do our full share in carrying out plans to promote better health for all Hawaii.

Our Hawaii Medical Service Association has outgrown its infancy. It is reaching out further and further, extending to each of the islands, and developing new plans to meet special circumstances. Each one of us should make a genuine effort to encourage this system of voluntary health insurance, which is our most effective answer to any proposals of bureaucratic control of the health field.

It seems to me that probably the most important enterprise we will have to undertake in the future is the development of congenial relations between the doctors and the public at large. My parting message is to urge you all to work diligently toward that end.

Thank you.

MINUTES OF MEETING

COUNCIL

Thursday, May 1, 1947, 6 p.m., Lihue Hotel

Present: Dr. Kuhns, presiding; Drs. R. B. Faus, H. L. Arnold, Jr., Richert, Sanders, Wallis, F. J. Pinkerton and Mr. Ed Stegen.

Medical Economics Committee: Dr. Pinkerton reported that the committee has been putting in a strenuous effort. When they first became a Territorial committee the council decided on an assessment of $75, and the work was started. It was found necessary to seek expert assistance and advice. Dr. Pinkerton phoned Chicago and the National Physicians Committee sent Mr. Ed Stegen immediately to assist in the planning of the entire procedure. He stayed for several days. Then it was necessary for him to return to Chicago. When the date of the public hearing was announced, Dr. Pinkerton again phoned Chicago and Mr. Stegen flew right back and worked with us and Smith, Mansfield and Cummins. Material has been circulated to all the doctors in the form of posters and literature. It seems necessary to explain more fully to the members of the Association what the committee has been doing. We have had excellent advice at all times from Mr. Stegen. In this Medical Economics report we have outlined what we have done and what we propose to do. We have estimated as far as possible what the cost will be. We cannot tell exactly what will be necessary. For instance, when we found that Nathan Sinai was going to speak last night before the Medical Social workers, we sent to the Mainland for Marjorie Shearon's booklet, which was shipped to us by air at a cost of $88. We employed Smith, Mansfield and Cummins. They will do our work at cost plus a retainer fee of 10 per cent. They get 15 per cent on ads in papers and radio broadcasting. Smith, Mansfield and Cummins plan to do a much better job for us in the future. Hal Lewis did not do as good a job as he might because he was so hard-pressed. Smith, Mansfield and Cummins plan to put a top flight man from the Mainland on their editorial staff. Much work will be done by the doctors themselves. Smith, Mansfield and Cummins know what the public will read and what is good copy.

The dentists will join us in the public relations program. They have less control over their members than we have. They have not yet realized they are in the same category with us. Drs. Dawe, Uyeno and Brash are going to visit the other islands and talk to the dentists there. We have suggested they contribute $40 each.

Last night at the meeting Dr. Sinai said the medical profession have plainly shown that they are going to take over and propose a plan, and they had better do it in the next two years because the general direction and trend of this movement is certain. Every week Dr. Sinai has reports of progress of socialized medicine throughout the world.

In view of all this there is a reason for the plan set forth in this report. We must get in there and pitch. It calls for a $75 assessment against our members. We do not think it will cost that much, but it depends upon how much the doctors will work. Marshall McEuen stated to Dr. Pinkerton yesterday that this was just the beginning. He wished that they had proposed their own bill in the beginning instead of supporting the Hospital Study Commission bill.

The question of supporting HMSA was brought up especially in relation to Maui. Dr. Pinkerton said the IBM machine is now in and the only thing holding up progress is lack of man power. Dr. Pinkerton will look for an actuary while he is on the Mainland. It will cost $20,000 a year, but it is very necessary. We have had excellent advice on the HMSA from Jay Ketchum and Ed Stegen.

MR. STEGEN: "It seems to me the significant things you should be aware of are these. First, to save your own necks, you must make the public aware of what organized medicine really means to do. Nobody is mad at the doctors, but organized medicine has lost some of the public's confidence. This problem is a responsibility you have shirked for years. It is time now to assume your responsibility. You must contemplate employing in the near future adequate men at adequate salaries. It might be possible to combine several functions. For instance, the Territorial Medical Association and HMSA might hire a public relations man. You will gain nothing by further delay. In the next emergency, if you fail now, you will be less able to defend yourselves. The public is learning our techniques and as long as you live you will continue to have compulsory sickness tax bills proposed in the Territory. Marshall McEuen is leaving the Territory. PAC is broke. Actually new faces and new names will appear but the same forces will be behind them. You must have good public opinion testing and good public relations to meet what is coming. You should get ready for a two-year pull."

DR. SANDERS: "Over a period of two years won't we go stale?"

MR. STEGEN: "No, you must now go into a constructive program. Sell 200,000 people HMSA in the next two years. HMSA, as quickly as it can do so on a sound financial basis, must enroll non-integrated groups. There will be problems in this but they will vanish as HMSA grows. For instance, on Maui I think you should have a campaign for a month and enroll the whole island. Your maximum absorption in the Territory is 200,000 out of a population of 500,000. What I am concerned about is that fellows in the profession must give not just lip service to HMSA but must do a real job of selling it.

"Almost simultaneously with your action, states all over the Mainland are doing the same thing. All over the Mainland the doctors think the state organizations should handle this problem."

DR. PINKERTON: "We cannot tell just how we will spend this money, but we must have a budget which will allow us to operate.

The National Physicians Committee has borne about half the expense of your recent campaign. They cannot continue to do that. You will each get a letter in the next two weeks asking for individual contributions to the work of the National Physicians Committee."

ACTION: On motion of Dr. Faus, seconded by Dr. Sanders, the report and recommendations of the Medical Economics Committee were unanimously accepted.

Annual Meeting 1948: The date and place of the next annual meeting were discussed.

ACTION: On motion of Dr. Pinkerton, seconded by Dr. Richert, it was agreed that the 1948 Annual Meeting would be held in Honolulu May 6, 7, 8 and 9, and that a registration fee of $10.00 would be charged to defray expenses.

Nominations: The report of the nominating committee was read and approved for referral to the House of Delegates. The name of the Councillor from Hawaii was left open for further discussion.

Auditor's Report: The Auditor's report for the year was read and approved. The following budget was presented for the coming year:

CASH BALANCE, MARCH 1, 1947		
Petty Cash Fund	$ 25.00	
Bank of Hawaii	19,386.87	
Bishop Bank—Savings Account	827.83	
		$20,239.70
BUDGET 1947-48 *(Exclusive of Medical Economics)*		
INCOME:		
Dues—331 active members at $15	$ 4,965.00	
Journal		
Advertising (Low estimate)	7,000.00	
Subscription and Sales	2,200.00	
		$14,165.00
EXPENSES:		
Salaries (including new salary to Mrs. Bennett of $100 a month from the Hawaii Medical Journal)	$ 3,400.00	
Rent	720.00	
Postage	400.00	
Journal Expense	8,000.00	
Travel	200.00	
Miscellaneous	1,000.00	
Library Appropriation (for two years, March 1, 1946—February 29, 1948)	200.00	
		13,920.00
NET INCOME		$ 245.00

ACTION: On motion duly made and seconded the budget was approved unanimously.

Special Assessment: Dr. Faus commended the Medical Economics Committee for the way they have handled the problem. The Council agreed to present the following recommendations to the House of Delegates:

1. There shall be three special assessments for Medical Economics and Public relations.
2. The first assessment of $75 which has already been levied shall be known as the 1946 assessment. It shall be collected by the County Societies from every doctor who is a member of the Association between December 1946 and December 1947. If such a member joins the County Society prior to June 30, 1947 his assessment should be paid by that date.
3. Any member joining a County Society between June 30, and December 31, 1947 should pay the $75 assessment by December 31, 1947.
4. A new 1947 special assessment of $75 shall become payable July 1, 1947 and should be paid before December 31, 1947. Members joining a County Society between July 1 and December 31, 1947 may have until June 30, 1948 to pay this assessment.
5. Another new special assessment for 1948 of $75 shall become payable July 1, 1948 and should be paid before December 31, 1948. Members joining a County Society between July 1 and December 31, 1948 may have until June 30, 1949 to pay this assessment.
6. Any member not paying his assessment by the final date in each case shall be dropped from membership for non-payment.

ACTION: This recommendation was proposed by Dr. Faus, seconded by Dr. Wallis, and passed unanimously.

Delegate to A.M.A.: The Territorial Medical Association has never paid any contribution toward the expenses of its delegate to A.M.A. convention. Dr. Pinkerton stated that he held the dubious honor of being the only delegate to pay his own expenses. It has been felt by various members of the Association that it was certainly time for the Association to recompense its delegate. It was brought out that Dr. Pinkerton would need the assistance of Mrs. Bennett at the convention at Atlantic City and she has indicated her willingness to attend the convention.

ACTION: On motion of Dr. Arnold, Jr., seconded by Dr. Faus, it was unanimously recommended that the expenses of the delegate should be taken from the funds raised by special assessment. Expenses shall cover a round trip ticket by air plus a per diem allowance of $20 for each day spent by the delegate at the convention plus extras which may be justified in the opinion of the delegate. On motion of Dr. Pinkerton, seconded by Dr. Faus, it was unanimously agreed that Mrs. Bennett's round trip plane fare should also be paid from the special assessment and in addition she shall also receive $20 per diem for the days which she works at the convention at Atlantic City and for the days which she spends on JOURNAL business at the A.M.A. offices in Chicago.

Library Appropriation: It was explained to the Council that the Honolulu County Medical Society is now employing its own funds for the operating expenses of the Medical Library. Therefore, the Territorial Association is bound by its by-laws to make an annual contribution to the expenses of the Library. Last year the customary $500 appropriation was held in abeyance until the Territorial Association knew more definitely what its status might be. It was proposed at this time that the Territorial Association appropriate $200 to the Honolulu County Medical Library as its contribution for last year and this year with the understanding that the Library would be able to secure sufficient funds from the Honolulu County Medical Society and other sources. This was merely an explanation of the Library item in the Budget which had been approved.

Hospitals: Dr. Faus spoke of the Hospital Council which had been appointed by the Governor. One Bill in the Legislature licenses all hospitals under the Board of Health, thus giving the Board entire control of their operation. This includes inspection and a fine of $1,000 a day per bed for failure to comply. Hospitals must operate according to U. S. Public Health laws. Secondly, designation of the Territorial Board of Health as sole agency to deal with the Federal Government in hospital construction. The Territory gets about $1,200,000 from the Federal Government, if it matches two to one the funds received from the Government. The U. S. Public Health regulations and administrative measure will make for better hospitals as long as we have a good Board of Health and good federal regulations.

Examination of School Children: The Secretary read a letter from the Hawaii Congress of Parents and Teachers regarding the summer roundup of children in a program to improve the health of school children and to bring about continuous medical supervision of children of all ages. Cooperation of the doctors has been asked in permitting this program.

ACTION: On motion of Dr. Faus, seconded by Dr. Pinkerton, the program was approved and it was agreed that the Territorial Medical Association would give any assistance possible. The matter would be referred to the Health Education Committee.

Resolution: The following resolution was presented by Dr. Pinkerton and approved by the Council:

RESOLUTION

WHEREAS, the House of Delegates of the Territorial Medical Association of the Territory of Hawaii, in common with physicians throughout the Nation, is fully conscious of the progressively effective work of the National Physicians Committee in its dissemination of factual information on the values, methods and accomplishments of American medicine, and

WHEREAS, the public, as a result, is being enlightened on the contributions, achievements and true aims of the medical profession in Hawaii and in the United States, therefore be it

RESOLVED, that the House of Delegates of the Hawaii Territorial Medical Association of the Territory of Hawaii affirms its approval of the activities of the National Physicians Committee, and heartily recommends to its affiliated societies and all individual physicians that they give adequate financial and moral support to the National Physicians Committee.

BE IT ALSO RESOLVED, that the President of the Hawaii Territorial Medical Association appoint the same members of the newly created committee on Medical Economics to serve as the component committee of the National Physicians Committee in the Territory of Hawaii.

There being no further business to come before the Council, the meeting was adjourned.

HARRY L. ARNOLD, JR., M.D.
Secretary

MINUTES OF MEETING

HOUSE OF DELEGATES

Friday, May 2, 1947, 2:00 p.m., Lihue Parish House

Reports: The following reports were read by title, accepted and placed on file:

Component Societies
1. Hawaii County—Dr. Bergin
2. Honolulu County—Dr. Arnold, Jr.
3. Kauai County—Dr. Boyden
4. Maui County—Dr. Patterson

Officers
1. Report of the Council—Dr. Arnold, Jr.
2. Report of the Secretary—Dr. Arnold, Jr.
3. Report of the Treasurer—read by Dr. Arnold in the absence of Dr. Fred Lam.

Committee Reports
1. Cancer Committee—Dr. Batten
2. Health Education Committee—Dr. Marie Faus
3. HAWAII MEDICAL JOURNAL—Dr. Arnold, Jr.
4. Fee Schedule—Dr. F. J. Pinkerton
5. Committee on Public Policy and Legislation—Dr. Pinkerton
6. Committee on Psychiatry and Neurology—Dr. Kepner
7. Board of Management, Mabel Smyth Building—Dr. Palma
8. Medical Advisory Committees.
 a. Bureau of Maternal and Child Health—Dr. Bowles
 b. Bureau of Crippled Children—Dr. Hatt
9. Medical Economics and Public Relations—Dr. Pinkerton

ACTION: On motion of Dr. Arnold, Jr., seconded by Dr. R. B. Faus, the Association unanimously went on record as especially approving of Dr. Kepner's record of achievement in connection with legislation and programs sponsored by the Committee on Psychiatry and Neurology.

Dr. Boyden spoke about Kauai Medical Service Association. He keeps folders on the table ready to give to patients so that they may be informed about the health insurance plan and suggested that other doctors do the same.

On behalf of the Association Dr. Strode expressed appreciation to Dr. F. J. Pinkerton and his committee for all of the valuable time they had expended for the Association.

The meeting adjourned at 3:25 p.m. to meet again at 12 Saturday noon.

Respectfully submitted,

HARRY L. ARNOLD, JR.,
Secretary

SUMMARY OF ACTIVITIES OF THE HAWAII COUNTY MEDICAL SOCIETY

Regular monthly meetings, as well as four special meetings, were held during the year. The program committee was very active during the past year which resulted in numerous scientific papers being given and medical films shown.

Lectures on scientific subjects were given by Drs. Jerry Price, Chauncey D. Leake, R. P. Wipperman, J. E. Strode, J. Palma, Tell Nelson, H. E. Coe, H. E. Crawford, and G. Tomoguchi.

Other speakers appearing before the society included Mr. Neal Ifverson for the HMSA; Dr. Sax for the Veterans Administration; and Dr. F. J. Pinkerton and Mr. Jay Ketchum for the Medical Economics Program.

During the year Drs. Wm. Bond, R. S. Fillmore, B. M. Eveleth, E. F. Slaten, R. T. West, W. H. Chock, W. T. Chock, and H. D. Ireland were admitted as new members, making a total of forty-two active members, one service member and two honorary members at the close of the year.

At a special meeting on December 13, 1946 the Hawaii County Medical Society went on record as approving and supporting the medical economics program outlined by the Honolulu County Medical Society. The program was again approved at the regular meeting of January 2, 1947. On February 6, 1947 the assessment of $75 for support of the medical economics program was approved.

Senate Bill 135, introduced by Senator Raymond Chang of Hilo, requiring twenty years' residency* as a requirement before a license to practice medicine in the territory could be obtained, was unanimously opposed.

The retiring president, Dr. Walter Seymour, gave the society a royal dinner at the Kona Tavern at its annual meeting. New officers were elected and a vote of thanks given to the outgoing officers for their very fine work during the past year.

HAROLD M. SEXTON, M.D.
Secretary

SUMMARY OF ACTIVITIES OF THE HONOLULU COUNTY MEDICAL SOCIETY

The Honolulu County Medical Society has held its usual monthly meetings during the past year, with the usual omission of the May meeting. Highlights of the year's activities are enumerated herewith; detailed reports are available in the County Society Reports section of the HAWAII MEDICAL JOURNAL.

Dues were again set at $60, with an optional reduction of 50 per cent to members receiving all their professional income in the form of a salary from an institution.

A resolution was passed in April, 1946, petitioning the next legislature to provide by statute that any persons engaged in the business of performing criminal abortions, or convicted of such offense on a previous occasion, be denied bail pending appeal from any subsequent conviction of the crime of abortion. No further action was taken in regard to this.

In August, 1946, it was announced that the Board of Supervisors of the City and County of Honolulu had removed the upper limit of $12,000 on the funds received in any one year from the 20 per cent of indigents' hospital bills which is paid the Society each month. At

* It actually only provided less stringent requirements for licensure of applicants who had resided in Hawaii for twenty years or more. It never came to a vote.—ED.

the same meeting, Nathan Sinai, Professor of Medical Economics in the School of Public Health at the University of Michigan, gave a talk on changing issues in medical economics.

In September, action was taken to rescue the financially insolvent Physicians' Exchange and Nursing Service Bureau by making up their deficit out of the Society's funds each month.

In October, approval was given to the H.M.S.A.'s request that it be authorized to insure students in all public and private schools, as well as the University, at $1 a month.

In November, the regular meeting was combined with the seventh annual meeting of the Hawaii Territorial Dental Association and the third annual meeting of the Territorial Association of Plantation Physicians. The Society voted unanimous disapproval of the action of a local pharmacy in distributing to the profession samples of what was described as "a mild yet effective emmenagogue"—in other words, a pharmaceutical abortifacient.

A special meeting of the Society was held on November 8, to discuss a plan formulated by the recently appointed Medical Economics Committee (Dr. F. J. Pinkerton, (chairman), Dr. H. C. Gotshalk, Dr. J. Palma, and Dr. H. Izumi). An assessment of $75 per member was passed with only three dissenting votes, and a budget expending $18,000 in the coming year was approved at the same time. The plan provided for an Executive Vice-President at $7,200 per year, a Public Relations Director at $4,800, a Secretary at $3,600, and $2,400 for expenses.

At the December meeting of the Society the impending visit of Mr. Jay Ketchum, director of the Michigan Medical Service plan, was announced. Mr. Theodore Rhea also announced that Palama would close its medical clinics as soon as the hospitals opened theirs.

At a special meeting of the Society on January 31, Dr. N. P. Larsen discussed the report of the Hospital Service Study Commission, and Mr. Jay Ketchum discussed compulsory versus voluntary health insurance plans. Dr. Pinkerton announced that the Medical Economics Committee had decided to employ an advertising firm instead of establishing the three salaried positions previously contemplated.

At the regular February meeting of the Society, a resolution opposing the recommendations of the Hospital Service Study Commission was adopted unanimously. Dr. Pinkerton announced that a panel of speakers had been formed from a group of volunteers, and that talks before clubs and over the radio were being arranged, as part of a campaign of public education regarding the proposed "compulsory sickness tax." At a February meeting of the Board of Governors, $10,000 was transferred from the Society's funds to the Library Endowment Fund.

At the March meeting of the Board of Governors the sum of $1,200 was appropriated for a post-graduate speaker for 1947. Dr. Cyrus C. Sturgis, Professor of Internal Medicine at the University of Michigan Medical School, was finally selected as the speaker. The membership meeting for March was addressed by a panel of five speakers on the subject of Medical Economics.

At the Society's annual meeting, in April, the Nominating Committee placed in nomination the name of Dr. Rogers L. Hill for President, and the names of the incumbent officers to succeed themselves. All were unanimously elected. The Society approved a fiscal arrangement for the coming year whereby the Society's and the Library's operating expenses would be covered by income from the public welfare department (20 per cent of the cost of hospitalization of indigent patients), all other income being allocated to the Library Endowment Fund; all expenses incident to the educational program of the Medical Economics Committee were to be paid out of the special assessment fund, this being turned over to the Territorial Association.

HARRY L. ARNOLD, JR., M.D.
Corresponding Secretary.

SUMMARY OF ACTIVITIES OF THE KAUAI COUNTY MEDICAL SOCIETY

The Kauai County Medical Society held its monthly meetings on the second Wednesdays of each month at the G. N. Wilcox Memorial Hospital, Lihue, Kauai, T. H.

The officers of the year 1946-1947 were:

President.....DR. BURT WADE
Vice President.....DR. DONALD DEPP
Secretary-Treasurer.....DR. EICHI MASUNAGA
Delegate.....DR. WEBSTER BOYDEN
Alternate Delegate.....DR. MARVIN BRENNECKE

Personnel:

The Society lost two members during the year, Dr. Isami Umaki and Dr. Homer Harris. Dr. Umaki was transferred to Honolulu, and Dr. Harris to Texas. Dr. Umaki's practice in Kapaa was taken over by Dr. Kenneth Fujii who was transferred from the Honolulu County Medical Society.

Dr. William Toney, who was at the Samuel Mahelona Hospital, became one of the plantation physicians for the Hanalei and Kilauea districts. He has recently entered part-time private practice with his new office located in Kapaa.

There are 13 members in this Society, 12 of whom are in active practice on Kauai.

Laboratory Set-up on Kauai:

Since Dr. A. M. Ecklund's laboratory was discontinued, this Society made an attempt to procure a pathologist from the Mainland through our Laboratory Committee. It was not possible to get any qualified pathologist to accept this position up to March, 1947. Since the strike on the sugar plantations, the economical situation to support a pathologist has considerably changed. At our last meeting, the members of the Society have decided to drop this matter until we can see clear ahead to finance a pathologist.

Kauai has no pathologist at the present time, but most of our routine laboratory examinations are handled adequately by the Board of Health. Their examinations are now done in the new Laboratory located in Lihue, Kauai.

Scientific Discussions:

Every possible effort has been made to add a few good scientific sessions in our meetings. There were several medical films presented during the year, and most of these were very good.

There were no papers presented by any of our Society members, except a few presentations of interesting clinical cases.

During the past fiscal year, we had a few speakers, and we were very fortunate to hear men who are in active specialties. Dr. Hatt of the Shriners Hospital filled one of our scientific evenings in November 1946.

Dr. Coe of Seattle who came to Hawaii as a guest of the Division of Crippled Children spoke on several phases of Plastic Surgery.

We also had Dr. Leake to give a lecture on pharmacology with emphasis on new developments.

Medical Economics:

This year has been a very critical year for medical practice in Hawaii, due to the effects of sugar plantation strikes and the trend of medical socialization. This Society realizes our territorial problem, and expects to support 100 per cent the Territorial Medical Economics Committee to kill political domination of medical care.

Blood Bank:

There is no blood bank on Kauai at the present time.

The Rotary Club of Kauai has offered to sponsor professional blood donors, if the Kauai Medical Society will endorse such program. Realizing the need and benefit of such project, the members immediately voted to support it.

It would take some time, but we expect to see this service operating on Kauai.

EICHI MASUNAGA, M.D.
Secretary.

SUMMARY OF ACTIVITIES OF THE MAUI COUNTY MEDICAL SOCIETY

April 15, 1947

The Maui County Medical Society has an active membership of 23, with two honorary members and four doctors waiting for membership. There were six members who transferred their membership elsewhere. During the year Dr. William Osmers was made an honorary member. On April 13, 1947, the Society suffered the loss of its President-elect Dr. W. D. Balfour.

The Society held regular monthly meetings with scientific papers being presented by off-island men.

The Society as a whole was active in pointing the way for health legislation during the November, 1946 election, meeting with numerous political candidates. Since the first of this year, we have been working under the Territorial Medical Economics Committee, to spread information against the compulsory tax health plan, speaking before all Maui clubs and groups available.

The Society has gone on record as favoring a central hospital for Maui.

The meetings have been well attended and it is felt that the Maui Society is a cohesive unit working together and during the last year very actively so.

REPORT OF THE COUNCIL

The Council held only two meetings during the year, both being held jointly with the Board of Governors of the Honolulu County Medical Society for the primary purpose of considering plans for fighting proposed legislation regarding socialized medicine.

At the first of these meetings, December 10, 1946, the program of the Medical Economics Committee of the Honolulu County Medical Society was discussed. At this same meeting, the new Hawaii Diet Manual was approved and the Secretary was authorized to so notify its authors.

At the second meeting, January 24, 1947, the Council made the Medical Economics Committee of the Honolulu County Medical Society a committee of the Territorial Medical Association, adding to it, ex-officio, the presidents of all the component county medical societies. The employment of Smith, Mansfield and Cummins advertising agency on a commission basis, and the expenditure of $7,500 in a period of one year in the campaign against socialized medicine (this budget to be subject to change by the Medical Economics Committee in the event of necessity) were both approved.

HARRY L. ARNOLD, JR., M.D.
Secretary.

REPORT OF THE SECRETARY

The total membership of the Association in all classes is 359, of which 331 (29 more than last year) are paid regular members. By counties this membership is made up as follows:

	REGULAR MEMBERS	MEMBERS IN SERVICE	SERVICE MEMBERS	HONORARY MEMBERS	TOTAL, ALL CLASSES
Hawaii	42	0	1	2	45
Honolulu	254	1	4	18	277
Kauai	13	0	0	0	13
Maui	22	0	0	2	24
Total	331	1	5	22	359

The total number of physicians licensed to practice medicine in the Territory of Hawaii as of April 1, 1947 is 439. Of this number only 379 are now residing in the Territory. Of these 379 doctors, 332 or approximately 86 per cent belong to the Hawaii Territorial Medical Association.

In accordance with the instructions of the House of Delegates last year, a poll was conducted by mail to determine the Association's stand in the matter of the one-year residence clause in the Medical Practice Act. The results, which were published (also in accordance with the instructions of the House of Delegates) in the January-February, 1947 issue of the HAWAII MEDICAL JOURNAL, showed that 154 doctors were in favor of the retention of this requirement for licensure, and 96 were in favor of its repeal.

HARRY L. ARNOLD, JR., M.D.

REPORT OF THE TREASURER

We anticipated that this would be a very difficult year financially, particularly because of the increase in publishing costs of the HAWAII MEDICAL JOURNAL. However, with a tight hold on the purse strings, we have come through safely and are in a sound position to begin our new fiscal year. As Dr. Arnold, Jr., will tell you, the JOURNAL will no longer be a financial burden, as it has always been before. As Managing Editor, Mrs. Bennett has put it on its feet, so that the income from advertising and subscriptions will more than cover the printing costs.

As long as the hospitals continue to pay the Honolulu County Medical Society for care rendered by its members to indigent hospital patients, that income provides ample funds for operating expenses of the Honolulu County Medical Library. The Territorial Medical Association, however, does benefit to a considerable degree by the Library. Chapter V Section 3 (c) provides that the Territorial Medical Association "shall assist in the maintenance of a medical library and shall from time to time, and at least once a year, appropriate funds for this purpose. The library shall be at the service of any member of the Association." Last year we held our usual $500 annual contribution in abeyance until we determined just what our financial situation might be. It is now recommended that we make a token

contribution of $200 to the Medical Library to cover last year and this year, assuming that the Library will have no difficulty in securing sufficient funds from the Honolulu County Medical Society and other sources to meet its budget.

It is further recommended that serious consideration be given to the matter of contributing to the expense of our American Medical Association delegate. This assignment as delegate has become one of greatly increasing responsibility. It would seem that the least we could do to show our appreciation would be to pay a part of the expenses involved.

It is also recommended that the salary of our Executive Secretary and Managing Editor be reconsidered, since there has been no increase in that salary since Mrs. Bennett came to us in 1944, although her work has become far heavier. This would seem appropriate at the present time because the JOURNAL, which has always been our greatest expense, can now pay its own way.

For more complete details of our financial situation, I refer you to the report submitted by the auditors.

FRED K. LAM, M.D.

REPORT OF THE CANCER COMMITTEE

The following report of the Cancer Committee for 1946-1947 is respectfully submitted:

The Cancer Committee has not been extraordinarily active during the past year. The Junior Chamber of Commerce appropriated money for an educational program in the schools. With publicity by the Board of Health, this program is at present underway.

The Cancer Committee of the Territorial Medical Association has been called upon to provide speakers for various groups during this educational campaign. This is being complied with as heretofore. In some instances the speakers are arbitrarily assigned, but in the majority of instances the groups ask for the speaker of their choice. A poll of the members of the Medical Association as to those who would be willing to contribute to this program had very gratifying results, in that 36 doctors expressed willingness to participate.

A diagnostic cancer clinic met at the Queen's Hospital each week for a considerable period prior to the war. Because of the war, it was necessary to discontinue this. There have been no successful efforts up to the present time to have this resumed. This is the only factor which is lacking in the Territory at the present time to provide adequately the needed management of malignancies and suspected malignancies.

Sufficient radium is available. There are deep x-ray units in two hospitals, in addition to private offices. Adequate surgery is available when needed.

It is recommended to the new Cancer Committee that the re-establishment of a diagnostic cancer clinic in one of the Honolulu hospitals be their first order of business.

G. A. BATTEN, M.D.
Chairman.

PUBLIC HEALTH EDUCATION COMMITTEE REPORT

Considerable progress has been made in the field of public health education in the past year. The Committee has sponsored two 13-week radio programs, monthly lectures to the beauticians of Honolulu, and instructions for schools of beauty culture in the Islands.

The new committee took over a series of recordings sent by the A.M.A. for this work, but since the material was found to be unsuitable for Honolulu broadcasts, the Committee returned these recordings and requested others. The new recordings were promptly sent by the A.M.A., and they were reviewed and approved by the Publicity Department of the Board of Health. This series of thirteen broadcasts was given to Mrs. Charles Fern to be broadcast from the Kauai station. The second series was given to KHON in Honolulu and has been broadcast at 6:30 every Friday night with favorable response from all who heard it. Not many doctors who listened could be located, but the others liked it, especially remarking upon the fine organ music which filled most of the time. This series was called "Time Out for Health."

We placed paid advertisements of this program in the newspapers, and, as far as we know, were not criticized for this quite revolutionary procedure.

At the request of various women interested in the beauty business, the Committee asked Dr. Harry Arnold, Jr., to give educational lectures with colored-pictured illustrations of many of the skin ailments found in Hawaii. These excellent lectures were publicly advertised and given at society expense at the Mabel Smyth Auditorium at eight in the morning. The audience averaged over 140 women who were very pleased and wished that these programs would be continued.

An interesting program of pictures and lectures for the benefit of the Kauai residents was planned, but was abandoned when it did not meet with the approval of the Kauai County Medical Society. The radio time and newspaper space offered were also given up. However, we already have notice of new radio programs by the A.M.A. which we hope to obtain shortly. We plan to include more groups in our educational lecture programs in the future.

The recent legislative activities left us all rather breathless; however, they set a pattern which will make our work easier in the future, and, we hope, more effective than ever before.

MARIE FAUS, M.D.
Chairman.

REPORT OF THE HAWAII MEDICAL JOURNAL

Six bi-monthly issues of the HAWAII MEDICAL JOURNAL AND INTER-ISLAND NURSES' BULLETIN have been published during the Association's past fiscal year. These six issues have contained a total of 438 pages—an increase of 70 pages (or almost 20 per cent) over the preceding year. The average issue contained 41 pages of letterpress (16 of articles, 18 of editorials and feature sections and seven of the *Inter-Island Nurses' Bulletin*) (eight more than last year) and 31 advertisements (two more than last year and four more than the preceding year).

The inclusion of the official publication of the Nurses' Association, Territory of Hawaii, has proved to be a decided success from the standpoint of the doctors, the nurses, and the JOURNAL's finances. Six hundred and twelve nurses pay us $2.00 a year apiece for JOURNAL subscriptions, and our advertising rate (because of our more than doubled total paid circulation) has gone up from its original level of $15 per page to $40. Six hundred and twelve nurses have an opportunity to see what the Territory's doctors are doing professionally and as an organization, and to learn their views on subjects of current editorial attention, as well as to find out what their own organization is doing.

Attention was called last year to the 73 periodicals received by the Honolulu County Medical Library with-

out cost, in exchange for the JOURNAL. There are now 88 such journals received, representing a total annual subscription cost of $227.75. In addition to this, the Book Review section of the JOURNAL, inaugurated with the March-April issue, has already enabled the JOURNAL to make the Library a present of 24 new books, at a total value of $179.

The JOURNAL continued to operate at an apparent deficit during the past fiscal year—but the deficit of the previous fiscal year was reduced by slightly over 40 per cent. Moreover, the total deficit for this year is considerably exceeded by the value of the books and medical periodicals donated by us to the Honolulu County Medical Library. So far as the total picture is concerned, the JOURNAL is already operating at a small profit; and the outlook for the future is extremely rosy, since we have not yet experienced the full benefit of the increased advertising rates permitted by our circulation of 1,196 (almost 10 per cent higher than last year). In the March-April issue, for the first time, the advertisements paid the printing costs. A resume of the financial status of the JOURNAL for 1946-1947 follows:

	Per Year		*Per Issue*	
Expense				
(printing and mailing)	$6,873.47		$1,145.58	
Income				
Advertising	$5,263.43		$875.57	
Subscriptions	1,330.95	6,584.38	221.83	1,097.40
		$ 289.09		$ 48.18

This represents an increase in annual cost (over last year) of approximately 70 per cent, balanced by an increase of 97 per cent in advertising revenues and an increase of 52 per cent in income from subscriptions. The net result is a 40 per cent reduction of last year's deficit, despite a considerably larger and much better-looking magazine.

With the May-June issue of 1946, Dr. Laurence M. Wiig was added to the editorial staff as Assistant Editor, in charge of the *Notes and News* section. With the September-October issue of the same year, Dr. Jay M. Kuhns, the new President of the Hawaii Territorial Medical Association, replaced Dr. E. A. Fennel on the Advisory Board, and the Associate Editors for the out islands were changed: Dr. H. E. Crawford replaced Dr. H. M. Patterson for Hawaii, Dr. Patrick M. Cockett replaced Dr. Samuel R. Wallis for Kauai, and Dr. K. Izumi replaced Dr. William B. Patterson for Maui.

Your committee respectfully submits that the HAWAII MEDICAL JOURNAL, since the advent of Mrs. Edith C. Bennett as Managing Editor, has become larger, much better looking, more than twice as widely circulated and much more nearly self-supporting, than it has ever been; and that it now stands an excellent chance of being not only self-supporting, but actually profitable; and that the position of Managing Editor, so ably filled by Mrs. Bennett, should carry with it at least a token salary in consideration of the large amount of time and effort demanded of its incumbent, as well as the financial benefit to the Association resulting from her efforts. One hundred dollars a month is suggested for such a salary.

HARRY L. ARNOLD, JR., M.D.
Editor.

REPORT OF THE FEE SCHEDULE COMMITTEE

The committee has been called upon by the Industrial Accident Commission and also by Industrial Accident Insurance underwriters to use their influence with a certain group of doctors who have failed to make First and Final reports on their cases. It was necessary to refer one case to the Board of Censors for disciplinary measures. The committee has tried faithfully and hard to impress upon those doctors the importance of making prompt reports and to supply the insurance companies with pertinent information. In spite of our efforts, some of the doctors involved did not comply. Because of the difficulties referred to above with a few recalcitrant doctors, House Bill No. 34 was introduced, the last paragraph of which is quoted as follows:

> Any employer or physician who wilfully refuses or neglects to make any of the reports or give any notice required by this section shall be guilty of a misdemeanor and punishable by a fine of not more than one hundred dollars, or by imprisonment for not more than ninety days, or by both such fine and imprisonment.

By their failure to make prompt reports they have brought stigma and criticism upon the profession at large. As a whole the medical profession has been most cooperative in complying with reasonable requests and it is to be regretted that because of the derelictions of four or five doctors the whole profession must be made subject to a penalty as above set forth.

A recent meeting was had with the Industrial Accident Insurance Underwriters Committee regarding amendments and necessary changes in the Industrial Accident Fee schedule with respect to skin grafts, nerve sutures and a few minor items more clearly defined in the nature of fractures, especially fractures of the pelvis, neuropsychiatric and brain cases.

At the present time there exist three different fee schedules: the Industrial Accident Fee Schedule, Hawaii Medical Service Association's Fee Schedule, and the Veterans Administration Fee Schedule. Studies should be made with the view of streamlining all of these fee schedules in the hope that they can all be consolidated into one. There has been much discussion pro and con concerning the bracket system of fee schedules of the Hawaii Medical Service Association. There appears to be good reason for consolidating at least the lower brackets of the HMSA into one, and consolidating the upper brackets into another, making but two general income brackets of the HMSA rather than five as now exist. On the other hand, there is merit to the bracket system of the HMSA in that it is unique and is not in use elsewhere. Also, it recognizes the attitude of the profession to follow the age-old principle of charging on the basis of ability to pay, no matter who pays the bill.

Six controversies involving fees were reviewed by the committee and the adjustments made were apparently satisfactory to all concerned.

For several months the committee struggled with the Veterans Administration Fee Schedule which was finally completed and submitted to the Administration in Washington. We are of course pleased that in spite of local opposition, the authorities in Washington approved this fee schedule to be operative through the office of the HMSA. The committee feels that this was a major accomplishment since after long and arduous study and comparing the fees for similar schedules on the Mainland we find that we have been very favorably treated, since the fees we have finally had adopted are among the highest of any Veterans Administration fee schedule in the country.

F. J. PINKERTON, M.D.
Chairman.

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

Because of the tremendous demands on the time of the Chairman, but four formal meetings of the committee have been held, in conjunction with the meetings of the Board of Governors of the Honolulu County Medical Society, at which meetings various bills were considered and discussed.

To date almost one hundred bills affecting directly or indirectly public health and the medical profession have been presented by the two houses of the legislature. With this large number of bills, it has not been possible for the individual members of your committee to digest them all, though the members have been notified of any important pending legislation.

As chairman of the Public Health Committee of the Chamber of Commerce, I appointed a sub-committee of three from the Public Health Committee to digest those bills and to lobby in favor of good bills or oppose bad bills. This course seemed wise because we were advised by reliable friends in the Legislature that our procedure was much wiser the way we have proceeded than would be the case were the doctors themselves personally present on so many bills, our idea being that we would save the medical profession for the more important jobs to come. Our decision seems to have been a good one.

The technic used has been to assign certain individuals to appear before hearings on those bills with which they were more intimately connected. Hence, we have covered all the more important bills, allowing the bills of less importance to be handled by the above method.

The trend in the lower house, especially, is certainly not friendly to the medical profession and there is a tendency to ignore the high standards of medical care in favor of bills that have an opposite effect. At our next legislature it behooves the professions to back in every way possible those individuals who are honest and intelligent, and who have the real interests of the people at heart.

F. J. PINKERTON, M.D.
Chairman.

REPORT OF THE COMMITTEE ON PSYCHIATRY AND NEUROLOGY

During the year, the Committee has continued work on projects outlined in last year's report. A summary of bills on mental hygiene introduced in the 1945 Legislature, and comments thereon, was presented in the HAWAII MEDICAL JOURNAL for April, 1946. A detailed follow-up report of the Committee's activities to June 13, 1946, was submitted to our President.

Work with other persons and agencies continued. Among those consulted were the following: Dr. Samuel Allison, Territorial Board of Health; Dr. S. D. Porteus and Dr. C. J. Herrick, psychological clinic; Mr. C. Nils Tavares and Mr. Ronald Jamieson, the Attorney General's Office; Mr. Thomas Vance, Director, the Department of Institutions; Dr. T. M. Mossman, City and County Physician; Dr. R. G. Nebelung, Public Health Committee, the Chamber of Commerce of Honolulu; Mr. Jon Wiig, chairman of the Legislative Committee of the Mental Hygiene Society of the Territory of Hawaii; Dr. Ferris Laune, Executive Secretary, the Honolulu Council of Social Agencies; the Honorable Carrick H. Buck, Judge of the Circuit Court; Mr. W. Z. Fairbanks, then Public Prosecutor, City and County of Honolulu; and others.

Mr. Urban Wild and Mr. J. Edward Collins actually drew up our bills. Dr. Nebelung, with Mrs. Margaret Hackfield, Executive Secretary, Mental Hygiene Society of the Territory of Hawaii, helped to publicize these bills and get them introduced into the Legislature.

Our bills introduced were as follows:

(1) An act to amend Chapter 233 of the Revised Laws of Hawaii 1945 relating to the disposition of mentally irresponsible persons indicted for, or acquitted of, crime; (2) An act to define criminal sexual psychopathic persons and to provide for the commitment of such persons and the procedure thereof; (3) An act to provide for police matrons in certain cities of the Territory of Hawaii, to define their powers and duties, and to provide for designating station houses or departments thereof, for the detention of women and children under arrest in said cities; (4) An act to amend Chapter 196 of the Revised Laws of Hawaii 1945 relating to evidence, by inserting a new section to the designated section 9840.01 relating to physicians testifying as to psychiatry; (5) An act to amend Chapter 47 of the Revised Laws of Hawaii 1945 relating to the Territorial Hospital, by inserting a new section to be designated section 2552.01 relating to the conveyance of medically indigent persons to the Bureau of Mental Hygiene; (6) An act to amend Section 2552 Session Laws of Hawaii 1945, as amended, to provide for the establishment of a child guidance clinic; (7) An act empowering the court to appoint expert witnesses in civil and criminal proceedings, providing for conferences and joint reports of expert witnesses, and the compensation of expert witnesses, and to make uniform the law with reference thereto and repealing all laws inconsistent therewith; (8) An act to amend Section 4021 of the Revised Laws of Hawaii 1945 by setting up standards of conditions, management and competence to care for persons suffering from mental disorders to be met by county detention wards; (9) An act to amend Chapter 69 of the Revised Laws of Hawaii 1945, as amended, relating to the care, treatment, commitment, hospitalization, transfer and discharge of persons who are mentally ill, feeble-minded, and habituated to the excessive use of drugs or liquors; (10) An act to amend Chapter 305 of the Revised Laws of Hawaii 1945 as amended by S. B. No. 293, Sections 12504, 12507-12511, 12516, 12523, 12529, 12530, 12533, and 12548, regarding the appointment of guardians for small estates of mentally handicapped persons.

At the time of this report, the Legislature is still in session. A number of similar bills have been introduced by other persons, and some of your members have appeared in committee meetings of the Legislature to discuss them. It seems quite likely that at least some of the legislative changes will be effected.

Your Chairman and Dr. Cloward have served as members of the new Medical Consultative Committee of the Territorial Hospital. The Vance-Guensberg report of October, 1946, in regard to the needs of the Territorial Hospital was submitted for approval to all members of the Psychiatric Committee. Only one member dissented; he felt that some of the requests did not go far enough and urged the establishment of a new psychopathic hospital in Honolulu. It seems to be the general feeling that this is a worthy project, but that Queen's Hospital Mental Health Department and the Territorial Hospital should be expanded first. It is gratifying to note that both projects are being contemplated at the present.

Contact with other organizations has been maintained.

Dr. W. W. Bauer, Bureau of Health Education, American Medical Association, and the National Committee for Mental Hygiene were supplied with information regarding mental hygiene activities in the Territory.

Proposed legislation and publicity were submitted to Dr. Samuel Hamilton, President of the American Psychiatric Association, and Dr. C. C. Burlingame, Chairman of the Committee on Public Education of the same organization, for their approval. With their sanction, certain education materials and an official release of the Committee on Public Education of the American Psychiatric Association of May 1946 were sent to all doctors and legislators about mental health needs. This was featured also in newspaper articles.

It has been exceedingly difficult to get articles for the section *Psychiatric Comment* in the HAWAII MEDICAL JOURNAL. It is requested that all of you contemplate writing an article on some phase of nervous or mental illness.

It is encouraging to note the increasing interest in further psychiatric and psychological facilities for the Territorial Hospital and the Queen's Hospital. It is believed that continued growth and support of the Mental Hygiene Society of the Territory of Hawaii (of which Dr. R. B. Faus is now president) will hasten the achievement of our goals.

The Committee is pleased to welcome as a new member, Dr. Marcus Guensberg, Medical Director of the Territorial Hospital. Thanks are extended to the old and faithful members for their assistance.

R. D. KEPNER, M.D.
Chairman.

REPORT OF THE BOARD OF MANAGEMENT, MABEL SMYTH BUILDING

The financial position of the Mabel Smyth Building is quite sound and income from rentals have been adjusted to meet the operating costs of the Building. Additional income from rental of the auditorium to non-member groups gives us a small surplus each year which is added to the reserve, totalling now almost $14,000.

Miss Eyman is now on a full-time basis as manager of the Building and has been divorced from the catering service.

It is a pleasure to report that the Mabel Smyth Building will no longer act as a community club for luncheons and other types of parties. We have returned to the original concept under which the affairs of the Building were conducted, that catering will be limited to such social affairs as are a necessary adjunct to regular, scheduled professional meetings and to the nurses who have need of the Building for personal relaxation and social affairs.

Members of the Medical Society are reminded that smoking is a privilege extended to them only during meetings and is prohibited at other gatherings. Cooperation is requested.

JOSEPH PALMA, M.D.
Chairman.

MEDICAL ADVISORY COMMITTEE, BUREAU OF MATERNAL AND CHILD HEALTH

It is recommended that:

1. The President of the Territorial Medical Association appoint from the membership two obstetricians and two pediatricians to work with the Bureau of Maternal and Child Health of the Department in a joint committee to study maternal and neonatal deaths and stillbirths in the Territory, with the purpose of determining the causes and invoking preventive measures to reduce maternal and neonatal mortality.

2. The Bureau of Maternal and Child Health of the Department of Health bring a prominent obstetrician as a visitor from the mainland to give a series of postgraduate lectures in obstetrics. And that this obstetrician be invited to assist the committee described in the first recommendation in the formation of their policies.

3. The committee realized that breast feeding should be encouraged, and that certain routine practices now used in hospitals tend to discourage breast feeding of infants. It is therefore recommended that the Bureau of Maternal and Child Health of the Department of Health consult with the medical and nursing staffs of hospitals with the purpose of reviewing and revising nursery and other hospital routines to further the practice of breast feeding.

H. E. BOWLES, M.D.
Chairman.

MEDICAL ADVISORY COMMITTEE, BUREAU OF CRIPPLED CHILDREN

1. In view of recent discoveries on the causes of congenital defects, it is recommended that the supplementary information section of the Territorial Birth Certificate, and the Blank for Reporting Visible Congenital Deformities of the Bureau of Crippled Children, and the procedure of handling these records in the Department of Health be considered for possible revision of the forms or the procedure or both.

2. It is recommended that in the development of any over-all community program for the treatment of cerebral palsy, medical advisory functions should stem from the Bureau of Crippled Children of the Department of Health and its Advisory Committee as appointed by the Territorial Medical Association, that the medical component of this program be under the direction of the above two groups.

3. It is recommended that the urgent need for hospital facilities for the convalescent and long term care of crippled and other children, including educational facilities, be brought to the attention of the Territorial Medical Association. It is further recommended that a statement on this subject be prepared and forwarded as an open letter to the Governor and Legislators of the Territory and to the newspapers. It is further recommended that the Bureau of Crippled Children of the Department of Health accumulate as accurate information as is possible regarding the high cost of hospital care for crippled children, the patient load to be expected for such a hospital, and the special facilities, equipment and personnel which would be required for its operation.

R. NELSON HATT, M.D.
Chairman.

MEDICAL ECONOMICS COMMITTEE
(summary)

A long range program of Public Relations is submitted for your consideration. It is to be conducted by individual members of the Association, primarily by their developing sympathetic and cordial relations between themselves and the other members of the community. But it must be guided "on the policy-making

level" "so that quick and final decisions can be made when necessary." It is estimated that the plan will cost between $15,000 and $20,000 annually. The following specific procedures are suggested:

(1) A daily newspaper column on health, written by members of the Association, probably in the *Advertiser.*

(2) A weekly five-minute radio program, written by various members of the Association, probably on KGMB.

(3) A paid-for radio program once a week, using material from the National Physicians' Committee, lasting thirty minutes.

(4) Regularly scheduled talks by various qualified doctors before the schools.

The broad objectives of the Hawaii Territorial Medical Association should be:

(1) To provide the best quality of medical care.

(2) To provide necessary distribution of medical care.

(3) To provide medical care at fair and equitable fees.

(4) To cooperate actively with every ethical group, agency or individual to provide for the better health of the people of the Territory of Hawaii.

Proposed expenditure: for 52 five-minute and 52 thirty-minute radio programs, plus Smith, Mansfield and Cummins' retainer fee, $16,782.00. It seems fairly certain now that the Territorial Dental Society will help to defray these costs.

F. J. PINKERTON, M.D.
Chairman.

MINUTES OF MEETING
MEDICAL ECONOMICS ROUNDTABLE

Saturday, May 3, 1947, at 9:00 p.m., Lihue Parish House

Dr. Kuhns turned the meeting over to Dr. Pinkerton.

DR. PINKERTON: You have been given the highlights of our work. Now we wish to lay the matter before you in more detail. We wish to inform you on every detail of our long range program as far as we can. Let us start by listening to questions.

DR. CRAWFORD: How far has the H.M.S.A. plan gone on the plantations?

DR. PALMA: The first plantation experiment was arranged with the Hawaiian Pineapple Co. With the help of Mr. Fassoth and other members of the board, a plan was drawn up with a lump sum payment for dispensary care and a fee schedule of the H.M.S.A. The rate schedule was thought to be adequate to cover the cost. Other pineapple companies came in. Now there are six. Five of them are breaking even. Unfortunately we did not include the 15 per cent overhead cost. As of May 1 rates will be increased to cover the 15 per cent overhead. In the sixth company there have been some difficulties with bad experience.

H.S.P.A. has been giving serious attention to starting up a similar plan in the sugar industry. Dr. Dean, who is on our board and on the H.S.P.A., naturally is holding back because of the poor experience with one pineapple company. We still are on fee schedules and they are good. If the rate schedule is sound and provides enough income to meet tough experiences, it is a cinch. We are all amateurs and we don't know how to go about the matter of starting up a rate schedule. It is being done and needs experienced help. We need a first class actuary and he will cost real money. The only way we see is to employ such a person on a consultation basis for six weeks or as long as it takes to get up a rate schedule. We cannot go out after much business unless we are sound financially. We cannot just set the rate schedule very high or people will not buy it. This is a matter of pressing necessity, of utmost importance. The board, both medical and lay, are keenly aware of this.

DR. ARNOLD, JR.: What about the possible difficulty in communities where the capitation plan will be applied in direct competition with non-plantation physicians?

DR. PALMA: In Wahiawa it has not been important. Dr. Wilkinson on Lanai is doing a bang-up job. We don't know how it will work in other communities, but we think the hardship would have to be waived.

DR. CRAWFORD: The situation will be no different. In fact it will be much better than under the old system. Now the patient has the choice of going to a non-plantation doctor.

DR. ARNOLD, JR.: I mean the financial difficulty from the point of view of the plan.

DR. BATTEN: How does the H.M.S.A. hospital cost compare with Blue Cross, and how do the services compare?

DR. PALMA: Blue Cross is hospital only and our hospital plan is very comparable to the Blue Cross.

DR. SANDERS: I think one important factor is that the doctors are supporting the H.M.S.A. It is our plan, it is our answer to the problem, and if we don't make it work, we are sunk.

DR. PALMA: That is true; it ties in with the long range program.

DR. COOPER: On the capitation plan is it $1.00 per head?

DR. PALMA: 50 cents apiece for the first 500 and so forth. The doctor gets paid 90 cents per visit in the dispensary. Doctors in town get $3.00 a visit. On the plantation the overhead is cared for and there is no loss on accounts. By the time you take off the costs of an office visit in town, you have about $1.15 left.

DR. COOPER: What about the too frequent return of a patient who has not been paying his bill?

DR. PALMA: The head of the family pays $1.65 per month for the policy in the H.M.S.A. Curiously enough they don't have as much abuse of the dispensary system as they had under the old system because of a union provision. They don't get paid for three days when they are off.

DR. PATTERSON: We feel a great need for H.M.S.A. on Maui.

DR. PALMA: It is because of shortage of personnel and lack of mechanical equipment that H.M.S.A. has not come to Maui. There are not enough people to go around.

DR. CRAWFORD: Is there any possibility of John Hancock taking over?

DR. PALMA: They have had some of their best men down. They can't afford to pay the fees the medical men expect.

DR. STRODE: Is H.M.S.A. applicable to everybody or only to certain groups?

DR. PALMA: Not yet. We are going to put on a community drive, but we don't dare go out in the community because we don't know what we can sell it for.

DR. STRODE: The greatest objection is that it does not cover individuals.

DR. PALMA: That is true. You must get a large coverage to be safe. That means you don't just take the poor risks.

DR. STRODE: Do you plan to extend it as time goes on?

DR. PALMA: Yes, we have to do it and do it soon, certainly by the end of the year.

DR. PHILLIPS: You talk about two kinds of policies. What about the third kind, a deductible policy covering catastrophic illness?

DR. PINKERTON: In Michigan that is the only one they go for. We should include that, as people want it. The proponents of socialized medicine criticize Michigan because it does not have full coverage.

DR. DUNN: Could we work through the Lions, Rotary, etc.? They represent most of the men.

DR. PALMA: That is a very good approach. I am indebted to you for that suggestion. As soon as we are ready to sell we should do that.

DR. PINKERTON: Right now every doctor in the Territorial Medical Association should get busy and sell hospital insurance at 3 cents a day. That is for hospitalization only. It is available to any individual. It is collected twice a year and covers up to $300 per year.

DR. CLOWARD: That would keep my patients in the hospital about two weeks.

DR. PINKERTON: We can't cover everything.

Dr. Palma has explained why we can't take on individuals. The present plan is to take up a section of the city at a time as a group. If we just extended it to everybody, we would get only all the bad risks. The plan depends on the doctors. We now have $9,000 of doctors' money, representing withholding fees deducted from your bill when you get your check. If the doctor is careless in the administration of the plan, we must protect the plan by taking away most of the money the doctor gets. We do not charge the doctors with abuse but only with carelessness.

DR. SEYMOUR: Send us the forms for the hospital insurance and we will sell it.

DR. PINKERTON: We have been held up, but we can now get the help.

DR. SEYMOUR: I think the doctors would be good salesmen.

DR. BOWLES: You could carry this matter through the various churches as Dr. Dunn has suggested doing with the clubs.

DR. PINKERTON: That is fine, but first we must get the rate schedule settled. This is extremely difficult for men not trained in insurance rates, or even to get a man down here who can arbitrarily set up a rate schedule. One epidemic and a little carelessness could wipe out all our reserve. Mr. Stegen says you folks can't talk about underwriting insurance for individuals until you have a sufficient reserve. You don't have it now.

DR. CLOWARD: Don't you think if the doctors would get behind the hospital plan and push that, it might be possible to boost the hospital limit for a year up to $500? At the present rates the cost of hospitalization is so high, if we can get enough people to boost the maximum to $500 or $600 per year, we would have something to sell.

DR. PINKERTON: It would be nice if we could cover everything. I expect the class of work you are doing will be the least easy to cover. When you are selling insurance, remember it costs $1.18 to process every policy. If you are selling hospital insurance you can't expect the central office to collect 90 cents every month, so we do it on a six months' basis. After that we would like you to sell a year's service. We want to give this to the doctors to sell. We have to keep our overhead down to 12 per cent. We are running over it because we are an experimental body. Your secretary is the best salesman next to you. We expect to start a school for all doctors' secretaries to learn about selling hospital insurance. I certainly hope there will be a better showing of doctors' secretaries than when we talked to them about the compulsory sickness tax. It is a matter of education. You must teach everybody in the community the principle of what we are trying to accomplish. Doctors must be conditioned from the ground up.

DR. ALLISON: We must go to the person who is not in the doctor's office.

DR. PINKERTON: Mr. Ketchum says the man who is sick and not feeling well should be hit at that time because he is then most susceptible. We must sell this plan or close up. We must deliver 200,000 policies in the next two years. A comprehensive plan is much better but at least we should sell the hospital plan.

DR. PHILLIPS: I think there is still a little misunderstanding. You are not selling service. You are selling insurance. You get what you pay for. The insurance Dr. Cloward talked about should be available, but obviously it will cost far more than what we are selling. You can get full coverage on an automobile but it is foolish to do so.

DR. CLOWARD: Could a man buy three policies in H.M.S.A.?

DR. PHILLIPS: There is no sound reason why Dr. Cloward's suggestion should not be possible.

DR. PALMA: We cannot move an inch until we have an experienced man who can give us a rate schedule. We must find the man. It costs money and it costs *us* money. After all, we talk about insurance. You are insuring our service. H.M.S.A. is a device to collect money out of an insurance fee to pay you fellows. One of the factors is this deductible fee down to 33 per cent. If the rate schedule is not right so that we are losing money we will have to take the loss. We are trying to protect ourselves against it by setting up a proper rate schedule.

DR. PINKERTON: Every doctor is an underwriter. Every doctor is a joint partner, in the deal to underwrite that risk.

DR. COOPER: Up to this time we have been talking about medical care. We defeated government medical care. All we are doing now is selling hospital insurance.

DR. PINKERTON: The original plan of the legislature was hospital care. Then they got into medical care as an adjunct. The primary purpose of the appointment of the commission was to deal with the high cost of hospital illness—nothing to do with doctors. We were forced to get into the medical care side. I talked with Mr. McEuen Thursday morning. He was at the legislature. They had a five per cent tax on professional incomes. Dr. Faus and I went over to fight it. We got a compromise. It will be a two per cent tax, in addition to all the taxes you now pay.

There are six doctors on the board of the H.M.S.A. It is our plan. It cannot succeed without our efforts. You must have confidence in the group that represents you. Please believe us until we get further information.

The report of the Medical Economics Committee

states that we cannot break down the estimated expense. During this trip we have gotten many new ideas. To the Medical Economics Committee have been added Dr. Phillips and the presidents of your county societies. You must have similar committees in your own societies. We are going to have to have money. All these suggestions cost money. You get the service of this Medical Economics Committee free, but the people must be employed to get results. Smith, Mansfield and Cummins have been employed. They are professional men. They have the know-how. We will have to supply the medical technique. They deliver with radio and the press and the like. This is going to cost $75 per year per man. Just two features we have mentioned—radio and paid advertising. We want to get away from paid advertising and use free publicity. As soon as this decision is arrived at in the house of delegates we will proceed. We will write every doctor in the association and tell him to send in copy to be used for the laity. This will be edited to make it readable for the public. If we have 365 issues of the *Advertiser* a year and on the editorial page of every issue we have a column written by doctors, every doctor must contribute. We are all in this deal. Some of you have good ideas. We can put them in the paper and they become one of the finest forms of public relations. The public thinks now the doctor does not care about the public.

On Tuesday we had a meeting with the dentists. They were full of apologies for not having gotten into our financial and moral program through this fight. We have proposed to the dentists to make a contribution of $40 apiece for the 250 members of the dental association. We have had overtures from the Osteopathic Association. In a very few days we expect overtures from the Naturopaths and Chiropractors. That presents a knotty problem. Those are some of the problems your committee has to contend with. These grow out of a good job of public relations. Even the lawyers feel they have a stake in this thing.

You might want to know how your money was spent. It brought pamphlets to Hawaii. The National Physician's Committee spent large amounts to send us publicity. We spent $88.00 for airmail postage to give booklets to distribute to the people who attended Dr. Sinai's lecture. A detailed expense account has not been prepared but will be mailed to each society.

Is there any concerted opposition to $75.00 for the next two years?

Dr. Kepner: I have been asked by one person to say that since he is working in a hospital on a salary, he does not believe he should pay $75.00 because this is the fight of doctors outside in practice. He cannot afford it, he says, and he thinks it is not just and right. I do not know about that. I have been told by half a dozen, perhaps a dozen, that they will simply not pay $75.00 for this scrap. They have not sent out any of this propaganda.

Dr. Pinkerton: Let us look at this. We have depressions. We have high ebbs and low ebbs. It seems like only yesterday that there were doctors in the Territory wondering where their next dime was coming from. Before the war one third of the patients in my office were charity patients. I did that because Palama was packed with people. My income at that time was considerably less than it was before. Now people are asking in my office, "What is this going to cost?" Now these people are saying, "This will have to be put off." There are new doctors coming to town who will have to scratch for business. Those boys are in the competitive game. The men in the institution doing a creditable job are pretty secure in their jobs. While some of us made money during the misfortune of war, those men did not get extra salaries, but their basic salary will remain the same even if a bonus is lopped off.

Sinai congratulated the commission on demonstrating to the public that the doctors could get together and work in an emergency. It showed the doctors could be aroused to take a serious interest in affairs.

The people in institutions are underpaid in many institutions. We know also that by our influence we can make legislation do what we want. Your Medical Economics Committee proposes right now to work out constructive bills. One will be to raise the salaries of skilled doctors in salaried positions. This need was brought out in recent investigations. These public health men who are specialists are underpaid, but the medical men can raise them. That is how we can help the institutional men. We are first of all doctors. There are many benefits to being in an institution when many other men will have to scratch gravel.

Dr. Cloward: If the C.I.O. are going to put through bills to needle medical men, and laws that are discriminatory, is there any reason why we could not take advantage of all the charity work we do? Why couldn't we charge the regular fee for charity work, take it off the books at the end of the year and make it deductible?

Dr. Pinkerton: It could be done, but you would not be any further ahead. Doctors must give service to the sick whoever they are. A great part of the doctor's life is responsibility—responsibility to his patient. He cannot slough off that responsibility to anyone, not even the U. S. government. When you get a sick patient the secondary consideration is the fee. Lawyers don't do any charity work. None of them are compelled to do so. The doctors are separate and apart. I am glad they feel that way.

Dr. Cloward: We have been humanitarians for thousands of years and will continue to be. Let us be business men, too.

Dr. Dunn: Where would you be if you cross off your charges?

Dr. Pinkerton: That is sleight of hand.

Dr. Sloan: I was going to keep out of this discussion. For the institutional man, there is something to be said on the other side. I don't have to go digging for myself. I get my salary. I don't see that this concerns me personally, but I am a member of the society, and I feel I should take my part in it. If some doctor is so hard up that he can't afford it, he might ask for an allowance on a personal basis but not as a group. I think we have chosen our jobs, and we choose to be members of the society. It is up to us to back up what they do.

Dr. Pinkerton: I want to thank you personally, Dr. Sloan.

Dr. Arnold, Jr.: I think we should give some consideration to allowing a man to participate in the activities of the society for the principle purpose for which it is formed, and yet stay out of this fight, if he is willing to accept the stigma of not being with us. I am referring particularly Dr. Leslie in Hilo. Should some consideration be given to that sort of thing it might encourage a lot of people to take that view, but it seems unfortunate to throw a man out because of his political or philosophical views.

DR. IZUMI: That sounds ideal. Perhaps some leniency should be considered. As doctors we are human. The attendance this morning shows what interest there is now in Medical Economics. Were we to take that lenient attitude it boils down to: either we participate wholeheartedly or we don't participate. Throughout the nation the profession has been made up of individuals. Some people have used the argument—"The only time you get together is when it affects your pocketbook." In California the 1946 and 1947 special assessments were $100 apiece for the state society's public relations program. These special assessments are over and above their regular dues. In many of the societies in California there is an additional large assessment of $60 for members of the county societies for county society publicity. We must continue to be unified in our thoughts. I think leniency should be considered in cases of hardship. I wonder if that is not a premature argument with conditions as they are today. It is the principle of the thing. You know that in Honolulu there may be a few who are not for it because they are not too much interested or for various other reasons. There could be too many "conscientious objectors."

This public relations work is not new. It is all well and good that we have had the support of the older men. The legislature is still in session, but I think we can consider the Compulsory Sickness Tax Bill dead. If only the younger men had carried this, this legislature might have given us a terrific time. If this measure came to a direct vote in the House, we could have lost. We don't know what would have happened in the Senate or with the Governor.

For the next two years the Public Relations Committee, the Legislative Committee and the Medical Economics Committee will have to carry the burden. We can't expect men like Pinkerton and Palma to be carrying the load all the time. Just a few of the younger men have contributed in this program. We have had valuable advice from Mr. Ketchum and Mr. Stegen. It probably cost the National Physicians' Committee $12,000 to send Mr. Stegen here at no cost to us. It is up to us to continue to back this thing not only publicly, not only professionally, but to back it solidly for the next two years.

DR. SEYMOUR: I happen to be a delegate. Something is going to be thought out. So far as I can see each component society should decide some of these matters themselves. Dr. Leslie is an individualist and thinks differently from some. I have not his letter with me, but there are two points in the letter. Number one indicates a very poor salesmanship job. He could not see what good it did him personally. That is subject to argument. Number two, as an institutional man there is a precedent in the Honolulu Medical Society where medical dues were reduced 50 per cent for the institutional man. Why not have a similar thing in the assessment? He ended on a friendly and hopeful tone. His resignation has been tabled at two regular meetings and has not yet been accepted. At the last meeting of the Hawaii County Medical Society the whole matter was held in abeyance until after this meeting. It is easy for you to say, "Let a man be dropped." It depends on the man. When you have a director of a Territorial institution who is an invaluable man in the community and the Society, you cannot say simply, "You don't agree with us, goodbye." If Honolulu wishes to carry on that way, all right. I cannot see why Hawaii cannot make its own decisions. I feel the County Societies are the ones to decide what is to be done, not any group of delegates or councillors. I cannot see why the matter could not be left to the individual societies to process these cases of individual financial hardship and why the county societies should not cut down on the assessment for certain individuals.

DR. PHILLIPS: I think you are absolutely right; that matters of that kind should be up to county societies. It would be a presumption for the Territorial association to interfere. I am not particularly worried about that. If this is worth a cent, we ought to be able to sell it to our members. The officers of your County Society should be able to handle the matter as they see fit.

DR. IRELAND: I understand that while you cannot say definitely how much the program will cost, there are many institutional men who would go along with $75 a year, but there are rumors that there may be another $100 soon and another $100 later. Could we have some statement on that?

DR. PINKERTON: We don't know yet just how much it is going to cost us. It costs money for everything we do. All constructive suggestions lead to further developments. We cannot say what the total cost will be. We would expect the assessment to be $75 yearly unless some unforseen development arises. We hope to have the machine rolling so we can fight the next legislation without a future assessment. A good public relations program ought to be a constant thing.

DR. IRELAND: Will there be another $75 assessment for this year?

DR. PINKERTON: Yes, the past $75 was for the emergency. We expect two more assessments of $75 each.

Mrs. Bennett read the recommendations made by the council regarding these assessments.

DR. SEYMOUR: The county societies want an accounting of the expenses and copy of the charter and by-laws of the Territorial Association.

DR. PINKERTON: We have been busy handling emergencies, but these will be sent to you just as soon as possible.

DR. DUNN: My cigarettes cost $8.50 per month. Can't you put that much into your society?

DR. SEYMOUR: The amount of money is not the question. It was the way the matter was presented the first time. You cannot throw 42 men on an island. All they ask is a chance to do things their own way.

DR. PINKERTON: Dr. Seymour, we have to function on something that is written. You asked us to write to you and explain what a barrel we have been over. Dr. Sexton wrote me several letters asking what we were doing, and the scene changed so fast we could not keep you informed. Everything we do will be reported to you as soon as possible. That is the purpose of this ten-page report and the purpose of this meeting. We ignored the Honolulu County Society, too. We needed help. We could not get help from the other islands on short notice. We are going to level off in a more serene way. Every member of the society will get an informative sheet and we ask you respectfully to read it.

DR. PHILLIPS: I think the individual County Societies are entitled to more consideration than was expressed. The society will have an assessment and it will be up to them to raise the money. The dealing with the individual members is the County Society's business.

MINUTES OF MEETING

HOUSE OF DELEGATES

Saturday, May 3, 1947
Luncheon 12 Noon, Lihue Yacht Club

Present: President, Dr. Jay M. Kuhns; President-elect, Dr. R. B. Faus; Secretary, Dr. Harry L. Arnold, Jr.; Delegates: Dr. W. Seymour and Dr. W. Bergin of Hawaii County; Dr. R. D. Kepner and Dr. R. B. Cloward, Dr. C. M. Burgess, and Dr. H. Izumi of Honolulu County; Dr. Webster Boyden of Kauai County; Alternate Delegates: Dr. L. M. Wiig, Dr. A. V. Majoska, Dr. M. E. Berk, and Dr. W. M. Walsh of Honolulu County; Dr. W. T. Dunn of Maui County.

Reports: Annual reports of officers, societies and committees having been read the previous day, were not re-read at this time.

ACTION: On motion of Dr. R. B. Faus, seconded by Dr. H. L. Arnold, Jr., the reports were accepted and ordered to be transmitted to the editor for publication in the HAWAII MEDICAL JOURNAL and placed on file.

Nominations: The chairman presented the report of the Nominating Committee as follows:

President.....DR. R. B. FAUS
President-Elect.....DR. JOSEPH PALMA
The Secretary and Treasurer to continue in office for two more years, in accordance with the amended By-laws.
Councillors.....DR. WILLIAM WINTER (Honolulu) replacing DR. BELL; DR. H. E. CRAWFORD (Hawaii) replacing DR. SEXTON

ACTION: The report of the Nominating Committee was accepted and the Secretary was instructed to cast a unanimous ballot for the election of these officers.

At this point Dr. R. B. Faus, the new president, assumed the chair.

The Nominating Committee had made no recommendation for the position of Alternate Delegate to the A.M.A. for one year to fulfill the unexpired term of Dr. Halford. Dr. Pinkerton was asked for suggestions.

DR. PINKERTON: Over the years I have been Delegate to the A.M.A. I have felt hopelessly inadequate. We have only one delegate. It is impossible for one delegate to cover all the important meetings. I have had to get much information from other people. The real importance of the A.M.A. is in the fourteen or fifteen conference committees. In the states with several delegates, they may be assigned to several committees. For Hawaii I can serve on only one or two committees. I was pleased yesterday to have the Council decide to send Mrs. Bennett back to help cover for Hawaii. I am interested that you should elect an Alternate Delegate who will really do the job assigned him. There is much politics in the convention. I am interested that you elect an Alternate Delegate who will do more than lip service. I will be present at every session that I can physically attend. Our job now is to condition several younger men who want to take part in economics and legislation —the other side of medicine. I have in mind the names of two men who are going to be there—Dr. Giles and Dr. Hartwell.

DR. BERGIN: Hawaii County Medical Society requested me to ask that Dr. Archie Orenstein be appointed Alternate Delegate. We would like to have him considered.

Dr. Burgess asked whether the Delegate or Alternate Delegate would be reimbursed. Dr. Pinkerton replied that for the first time the Council had authorized the payment of Dr. Pinkerton's expenses as Delegate.

DR. FAUS: I believe that by reason of the fact that your interests would be greatly concerned with Medical Economics, this is a very proper charge against the Medical Economics Fund. I am quite sure it would please all the members to see some of the Medical Economics fund expended for the expenses of their Delegates to the A.M.A. I feel your expenses, those of your Secretary and your Alternate should be paid out of this fund.

DR. PINKERTON: I suggest that half of the Alternate's expenses be paid and then he may be directed to attend the important business meetings.

ACTION: On motion duly made and seconded the nominations were closed. A written ballot with first, second and third choice on each ballot was taken for the position of alternate delegate. Dr. Hartwell was first choice, Dr. Giles second and Dr. Orenstein third. It was agreed that these men would be invited in this order to act as alternate delegate, with the understanding that the man who accepted would be willing to attend the A.M.A. Convention again next year as alternate.

ACTION: On motion of Dr. Walsh, duly seconded and carried, it was unanimously voted to pay the expenses of the Delegate and the Executive Secretary, and half the expenses of the Alternate Delegate, from the Medical Economics Fund.

Next Annual Meeting: The recommendation of the Council was read.

ACTION: It was unanimously agreed that the 1948 meeting should be held in Honolulu May 6, 7, 8 and 9 and that a registration fee of $10.00 should be charged to defray expenses.

Budget: The budget for the coming year which had been approved by the Council was presented to the Delegates and unanimously accepted.

Medical Economics: The recommendations of the Medical Economics Committee, incorporated in Dr. Pinkerton's report, were approved. Dr. Cloward asked whether we were supposed to contribute for the employment of an expert actuary for the H.M.S.A. Dr. Pinkerton replied that it was the responsibility of the H.M.S.A. to pay for that assistance.

Special Assessment: The recommendations of the Council regarding the $75.00 assessment for 1946, 1947, 1948 were presented and discussed at considerable length. The Hawaii Delegates particularly emphasized that they felt the county societies should each be allowed to use their own discretion in the manner of collecting the assessment from individual members.

ACTION: It was unanimously agreed that the Association would levy three annual assessments upon the county societies amounting to $75.00 per member for the years 1946, 1947 and 1948. Each county would be responsible for the amount assessed against it, but might deal with its own members as it chooses in relation to this assessment.

Adjournment: The meeting adjourned at 1:40 p.m.

Respectfully submitted,

H. L. ARNOLD, JR., M.D.
Secretary.

Hawaii Medical Service Association

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INTER-ISLAND NURSES' BULLETIN

Official Publication of the Nurses' Association, Territory of Hawaii

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Sixteenth Annual Convention of the Nurses' Association Territory of Hawaii

May 1, 1947

REPORT OF THE ADVISORY COUNCIL MEETING
April 30, 1947

The Advisory Council for the 16th Annual Convention of the Nurses' Association, Territory of Hawaii, met April 30, 1947, at 2 p.m. in the Mabel Smyth Building. Those present were: VIRGINIA JONES, *President:* HELEN GAGE, *Vice President:* BERNICE WOLF, *Secretary;* HARRIET KUWAMOTO, *Treasurer;* CHARLOTTE TRUJILLE (Hawaii), BETSY BOYLIN (Maui), CLAIRE CARRA (Kauai), ESTHER STUBBLEFIELD (Oahu), JETTIF JACOBSON (Hawaii), THELMA PATTEN (Hawaii), ELIZABETH SHERIDAN (Maui), LAURA DRAPER (Oahu), SR. MARIE THERESE (Oahu), THELMA HENSLEY (Kauai), and MARY THOMAS (Oahu).

It was pointed out that the money which might have paid an executive secretary was sent to national headquarters as increased dues. It was decided to ask the Finance Committee to prepare a tentative budget and place it before the group in order that they might see where the money would be used if dues were raised and the type of program which could be carried on.

A report was given concerning the Margaret Jones Memorial Fund and considerable discussion followed.

Mr. Kimball, the attorney for the Association, attended part of the meeting and advised as to whether or not an article concerning collective bargaining should be added to the revised by-laws. He advised that such an article need not be attached at this time if the Articles of Incorporation were revised to include the promotion of the welfare of nurses as one of the Association's purposes.

Several resolutions were brought before the group in order that they might know something about them before they were voted on by the House of Delegates. These resolutions appear in the minutes of the meeting of the House of Delegates.

Considerable discussion followed concerning the *Bulletin.* but the Council felt that its publication should continue for the present as it has in the past.

There was also some discussion concerning Article VII, Section 23, of the proposed revision of the by-laws having to do with the Board's authority to levy special assessments on members. It was decided to bring up this matter before the entire group.

BERNICE WOLF,
Acting Secretary.

REPORT OF THE BUSINESS MEETING
May 1, 1947

The business meeting was called to order at 9 a.m. May 1, 1947, at the Mabel Smyth Building. Sister Marie Therese led the group in repeating the Florence Nightingale Pledge.

Mrs. Gage introduced Miss Virginia Jones as President of the Territorial Association and presented her with a lei.

Miss Jones gave the president's address.

Mrs. Gage introduced Miss Jones as the presiding officer and in that capacity she called for the reports of various officers and committees.

The report of the Credential Committee was read by Miss Bernice Wolf. She read the names of the delegates who were registered from each county association. The report was accepted.

Miss Laura Draper gave the report of the Program Committee. This report was also accepted.

A motion was made, seconded and carried to suspend reading of the minutes of the last annual meeting.

The reports of the secretary and treasurer were read and accepted as read.

The president called for the reports from the four district associations: Oahu, Maui, Kauai, and Hawaii.

The next report was that of the Revision and Membership Committee which consisted of the revision of the by-laws. The report was accepted.

The report of the Finance Committee was accepted as read.

The report of the Legislative Committee was read and accepted.

The reports of the Arrangements Committee, Information and Publicity Committee, Education Committee and League of Nursing Education, *Bulletin* Committee, Nominating Committee, Committee on Margaret Jones Memorial Fund, Nursing Service Bureau

Committee and Library Committee were read and accepted as read.

The presiding officer called for the reports of three special committees which were: Wages, Hours and Personnel Practices, a Special Investigating Committee of the Margaret Jones Memorial Fund, and the War Records Depository Committee. These reports were accepted as read.

The report of the Mabel Smyth Building was given by Miss Eyman. It was accepted as read.

The report of the Oahu Health Council was given by Miss Draper in connection with the Honolulu City and County Report.

Mrs. Gage took the chair while Miss Jones gave the report of the Board for the Licensing of Nurses, Territory of Hawaii. It was accepted as read.

Miss Josephine Hall gave an interesting brief report on the highlights of the Biennial Convention which she attended in Atlantic City in the fall of 1946.

Since there were no other reports, the meeting adjourned at noon.

BERNICE WOLF,
Acting Secretary.

REPORT OF THE PRESIDENT

To the members of the Nurses' Association, Territory of Hawaii, Friends and Guests:

It is very comfortable and satisfying to look back on past achievements. The reports of officers, committees and district associations will give you the satisfaction of accomplishment, I know. It is far less comfortable to look ahead at what must be done. In no other of the sixteen years of the existence of this association has there been more at stake in nursing. With the earnest hope that we may accept the challenge which the future holds, I would like to point out what I think lies ahead.

A comprehensive program for nationwide action in the field of nursing formulated by the National Nursing Council sets up three major purposes for organized nursing today and tomorrow.

The first: "to develop and enforce optimum standards in the recruitment, preparation, and practice of the profession, its specialists and auxiliaries." In this area, the Nurses' Association, Territory of Hawaii, can look back with some pride. Its revised Nurse Practice Act, making licensure of practical nurses mandatory and giving the Board for Licensing of Nurses authority to set standards to survey and accredit schools of nursing for both professional and practical nurses, is the first necessary step. The implementation of this Act is the task of the future and only if this is wise and progressive will the law be justified. In order that the Board may perform its functions in relation to this bill, provision must be made for full-time or part-time service from some one qualified to survey and advise schools of nursing. The amendments to the Nurse Practice Act now in the Legislature provide for increased licensing fees for this purpose.

Recruitment of students has been done in the past on a competitive basis in Hawaii by the three schools because the Association has not been able to provide counselling and guidance to high schools on a vocational rather than a school basis.

I hope the County Associations will be able to report progress in developing programs of vocational information for high schools in their districts.

Expert nursing, not just nursing, should be our goal. As we ask for higher salaries, shorter hours and recognition as a profession, the quality of our nursing care must justify all of these things. Provision for studies of quality of actual care given and criteria for evaluation and continuous staff education and refresher courses for graduates must receive our attention along with our demand for working conditions which make expert care possible.

The second of the major purposes reads: "to promote and protect the social and economic welfare of qualified nursing practitioners." Your committee on Wages, Hours and Personnel Practices will report to you on steps taken in this direction. You will be asked to take action on some of their recommendations. May I point out to you that in Hawaii "practical nurses" are now also "qualified nursing practitioners" and that this Association must assume responsibility for promoting the social and economic welfare for this group also in a way which will assure safe adequate care for the sick under their care.

The third major purpose is "to make qualified nursing service (professional, specialist and auxiliary) readily and economically available to care for all the individual and general health needs of the American people." This the nursing profession cannot do by itself. The consumer and the specialist, the legislator and the practical nurse, the hospital administrator and the medical profession, public health officials and educators, in short, the whole community population are involved. This purpose is the one which gives the other two purposes their only meaning and value, for quality care is of no worth if it is not accessible to those who need it. You will hear later of efforts here in Honolulu to bring together representatives from these groups to study community nursing needs, and to plan programs to meet the needs.

The report of the Legislative Committee shows how involved nursing becomes in laws affecting many governmental departments. Nursing must find its place in prepayment medical care plans. It must concern itself with the expansion of hospital and public health programs, for they must be staffed by nurses. Our Association must be concerned by the figures in the report of the Nursing Service Bureau indicating that there are many unmet calls for nursing service. Now that nursing has admitted that there is a place for the well-trained auxiliary worker, it must assume responsibility for helping the practical nurse group to develop its own ethical standards, group loyalty, a sense of its importance in the nursing care program and an understanding of its responsibilities and limitations. As professional nursing developed its standards through the individual's membership in the professional organizations, so must practical nurses and other auxiliary workers organize and develop standards for themselves. Legislation will not do it.

Nationally the six national nursing organizations are searching for a structure plan which will promote these three purposes to better advantage than is now possible. The plans submitted recommend radical departure from the present American Nurses' Association organization and policies. Study of the structure plans recommended can be done adequately only by small groups, therefore no place has been given to its discussion in this meeting. The Board of Trustees hopes, however, that you will each feel responsible for organizing a study group and send in to the Joint Committee on the Structure of National Nursing Organizations your individual or group opinions.

I have attempted to point out what we as a nursing

organization must do if nursing is to maintain and develop its place among the other professions responsible for community service. It will take money, paid personnel, volunteer help and leadership. All of it must come from the Nursing profession in Hawaii which is *we* here today, and the several hundred nurses in Hawaii who do not belong to the Association for reasons only known to themselves. We must accept the challenge if nursing is to survive, let alone progress. I hope you will give particular attention to the committee reports, but especially to that of the Finance Committee before you accept the membership dues recommended in the revised By-Laws.

It is hoped that our action here at this Sixteenth Annual Convention of the Nurses' Association, Territory of Hawaii will demonstrate our willingness to step forth and take the leadership which the importance of nursing demands.

Please accept my sincere thanks, all of you, for your help and your patience in seeing a new hand at the business through a particularly hectic year.

VIRGINIA A. JONES
President.

REPORT OF THE SECRETARY

Between January 1, 1946 and April 1, 1947 the Board of Trustees of the Nurses' Association, Territory of Hawaii held thirteen meetings.

The most important things brought before the Board at these meetings are brought to your attention in this report.

One problem facing the Board in January, 1946 was the financing of the Nursing Service Bureau. Through an arrangement with the Medical Society the Bureau was assured of a certain income from the Physicians' Exchange; an arrangement with the Mabel Smyth Building Committee was made which cancelled the payment of rent in return for services; there the Nursing Service has been able to continue. In view of the fact that these arrangements were made, no further requests were presented to the Chamber of Commerce Health Committee.

A special committee was appointed to analyze the policies of the Margaret Jones Memorial fund and make recommendations regarding changes.

The carrying out of the program of the Nurses' Association has been disrupted and retarded because of the resignation of Mrs. Brown as part-time Executive Secretary. While it has been possible to have an office secretary, it has been impossible to carry through projects and various pieces of work as they should be done. There is inadequate personnel for counselling and placement. As acting secretary, I would like to recommend earnest consideration be given for raising funds to employ an executive secretary.

The Board of Trustees approved the formation of a Community Nursing Council. Your president has said more about this in her report.

The Maui Association contributed fifty dollars to be used for a Jane Service Memorial. The Board moved to earmark the fifty dollars until a memorial is initiated for Miss Service.

The Board approved the recommendation to county associations to give consideration to the offer of the Hawaii Medical Service Association to give service to members of the nurses' association since collection of dues must be made by the county units.

Miss Von Driska was the representative of the Territorial Nurses' Association who attended the conference on Economic Security held by the American Nurses' Association in Chicago last year. Her report, information and data which she collected have been turned over to Miss Boeker, Chairman of the committee on Wages, Hours and Personnel.

In January, 1947 the Board approved an increase in the fee schedule as requested by the Private Duty Nurses.

The revision of the constitution and by-laws was presented to the Board for approval. It was then sent to the revisions committee of the American Nurses' Association and returned with recommended changes. The changes were made and the revised copy was mailed to the membership.

Miss Mollie Kirchgassner will represent the Territorial Nurses at the Congress of the International Nurses' Council in Atlantic City next month. It is hoped that her report will be published in the *Bulletin* at a later date.

Sister Marie Therese has accepted the appointment to the Board to fill the unexpired term of Sister Mary Albert who went to the Mainland.

In closing, I would also like to report the total membership of the Nurses' Association, Territory of Hawaii as of April 1, 1947 to be 631. The total for 1946 was 526.

BERNICE WOLF,
Acting Secretary.

REPORT OF THE FINANCE COMMITTEE

The members of the Finance Committee met twice during 1946. At the first meeting, held in September, 1946, the committee recommended the payment of $500 to the HAWAII MEDICAL JOURNAL from the General Fund of the Nurses' Association, Territory of Hawaii. The committee felt that the Bulletin Committee should be responsible for the ways and means of financing the HAWAII MEDICAL JOURNAL in the future.

The second meeting was held on December 10, 1946. The tentative budget prepared by the treasurer of the Nurses' Association, Territory of Hawaii, was reviewed and the foregoing budget was formulated by the committee:

ESTIMATED INCOME AND EXPENDITURES OF NURSES' ASSOCIATION, TERRITORY OF HAWAII
from January 1, 1947 to December 31, 1947

INCOME:		
Membership dues		
Estimate of 525 members at $8.00 per member	$4,200.00	
Sale of Calendars		
Estimated net income	750.00	
Refund		
On auditing and bookkeeping from Margaret Jones Memorial Fund and Nursing Service Bureau for 1945 and 1946	800.00	
Total		$5,750.00
EXPENDITURES:		
Dues to ANA—525 members at $3.00 per member	$1,575.00	
Nursing Service Bureau—$1.00—per member	525.00	
Part-time office secretary—$150.00 per month	1,800.00	
Rent—$45.00 per month	540.00	
Subscription to HAWAII MEDICAL JOURNAL	1,050.00	
Hiu, Dean & Paris—auditing and bookkeeping	200.00	
Telephone at $8.00 per month for 6 months	48.00	
Stationery and office supplies, stamps, etc.	100.00	
Convention expenses	200.00	
Miscellaneous	25.00	
Gross Income Tax on sale of calendars	11.25	
Printing of constitution and by-laws	100.00	
Telephone service for 5 months in 1946	43.00	
Total		$6,217.25
EXPENDITURES	$6,217.25	
INCOME	5,750.00	
DEFICIT	$ 467.25	$ 467.25

The dues of the American Nurses' Association were increased from 75 cents to $3.00 per member. Ways and means to meet this increase and to balance the budget were discussed. The following suggestions were made by the committee for consideration:

1. To increase membership in all the County Associations through active membership campaign.

2. To have the increase in dues of $2.25 to the American Nurses' Association assumed jointly by the Nurses' Association, Territory of Hawaii, and the County Nurses' Associations. The County Associations assume $1.00 of this increase and the Nurses' Association, Territory of Hawaii, $1.25. This would mean an increase in the dues of the County Nurses' Association to the Nurses' Association, Territory of Hawaii, from $8.00 to $9.00.

3. To have each County Association sponsor a fund-raising program and share its earnings on a 50-50 basis with the Nurses' Association, Territory of Hawaii, to help meet the deficit in the present budget.

The committee also discussed the contributions to the Structure Study and the American Memorial Hospital in France. The Committee felt that the Association should not assume any responsibilities toward the contributions, but each member of the Association be encouraged to contribute towards them as she desired.

HARRIET KUWAMOTO,
Chairman.

REPORT OF THE LEGISLATIVE COMMITTEE

During the time Miss Valentine was in Hawaii as consultant to the Licensing Board, an advisory committee was appointed by that Board. After careful study, this committee recommended that a complete revision of form be considered if the nurse practice act were opened, and drew up the proposed revision. Thus the main work of your legislative committee has been the revision of our nurse practice act.

After a conference with Senator Thelma Akana and the Licensing Board, it was decided not to present a new act. Amendments toward correction of the present act have been made and were presented by Senator Akana as Senate Bill No. 496. This bill has been passed by the Senate and the House.

Your committee has taken an active part in all health legislation and has called upon many more nurses than its committee membership.

1. It is hoped that the first school for practical nurses might be started in September of this year at the Honolulu Vocational School. This is the cause of your committee's interest in the finances of the Department of Public Instruction. Committee representatives joined with the Community Nursing Council and appeared at the hearing of the finance committee on the D.P.I. budget.

 The welfare of the public schools is not only of interest to our membership, but it is vital to our whole nursing program, since our three nursing schools absorb the end product of the public schools. When the practical nursing schools are established, our interest in the elementary and secondary education of our students will greatly increase.

2. Representatives of your committee appeared before the House Finance Committee to stress the importance of the adequate staffing of the County of Oahu with public health nurses to our public health nursing course at the University of Hawaii. The field experience of these students depends upon the public health nurses here, and the staff is very short.

3. We have taken no stand as an organization on the proposed medical care plans. Our hospitals have made no statements as to their opinion on these bills. The physicians have taken a definite stand against their passage, and we do not see how any plan which includes medical service can be successful without the cooperation of the physicians. The printed reports of the Hospital Service Study Commission and Mrs. Bolles' report on the Survey of Hospitals and Nursing Homes deserve very careful study and consideration by every nurse. Copies of these reports have been sent to you.

4. We have offered every assistance to the Department of Institutions to obtain funds for the Territorial Hospital. Mrs. Bolles' report shows that 32.6 percent of all the hospital beds in the territory are for nervous and mental defectives, but our student nurses still have no psychiatric affiliation. The first step toward such a program is having the legislature adequately finance the Territorial Hospital, and so has to come within the province of your legislative committee.

5. Faced with increasing losses, the hospitals have requested financial subsidy from the territorial government and relief from payment of the unemployment compensation tax. Since excusing the hospitals from unemployment compensation would also remove the benefits of this tax from hospital employees, your committee felt that this should be to our interest to investigate. Our national organization is busy constantly in Washington seeking to have all nurses included in social security, of which unemployment compensation is a part. Upon investigation, however, we found that only one claim had ever been made by a nurse to the unemployment compensation office here, and this claim was found to be unjustified. Since the solvency of the employer is definitely a factor in job security, we feel that our efforts should go towards assisting the hospitals to exist.

You have probably wondered why in this report, all of our emphasis has been placed on committee hearings in the House of Representatives. Senator Akana, a member of our organization, is chairman of the Senate Health Committee and a member of the Senate Ways and Means Committee. She has watched out for our interests in the Senate. We hope that all of our members appreciate what Mrs. Akana and her clerk, Mrs. Bolles, have done for all of us, as does your legislative committee.

DOROTHY C. BLANK,
Chairman.

REPORT OF THE HOUSE OF DELEGATES

The meeting of the House of Delegates was called to order by the president, Virginia Jones, in the Mabel Smyth Auditorium at 10:30 a.m. on Friday, May 2, 1947.

The names of those members nominated for the office of Vice President, Secretary and Trustees from Kauai and Honolulu were read and their qualifications given by Mrs. Helen Gage.

Old Business: Under old business the report of the Revisions Committee was given by Mrs. Gage.

ACTION: The by-laws as circulated 60 days ago were adopted as the official by-laws.

Discussion: There was discussion about the clause which gave the Board of Trustees the power to levy an amount not exceeding $5.00 per person upon the members of the Hawaii Territorial Nurses' Association. Discussion from the floor indicated that it was not democratic for the Board of Trustees to have this power. Others thought the members should have full confidence in the Board of Trustees. Mrs. Gage pointed out that a representative from every county would be on the Board and that the county societies as a whole would raise the money.

Miss Kerr said that an organization enjoying professional status must be prepared to spend money and that it might not mean taking $5.00 every year. She said that most of the nurses refused to give up time to the work of the organization and that they should be, in that event, prepared to give money. She said that the organization should hire competent people and thought it would be a good plan to raise the dues.

Mrs. Pinner stated that she believed that a membership committee should put on a membership drive and that that would solve the whole difficulty. Miss Randel pointed out that in the State of Nebraska the dues were $18.25 per year and that in general in the States the rates had been raised.

During the ensuing discussion the points were raised that the hospitals should emphasize more the need for nurses to join the Association; that collective bargaining would be difficult without complete representation, and that literature should be sent to or made available for nurses who are not members of the Association to show them the benefits of being a member of that Association.

Miss Patience Clarke felt that the dues should be increased to provide for an emergency fund so that the Board of Trustees would not need this power.

A motion was made by Miss Margaret Barnes that item 23, section 1, article 7 of the by-laws, relating to the power of the Board of Trustees to levy assessments, be stricken out of the by-laws. It failed.

ACTION: Miss Draper moved that the word "levy" be stricken out of item 23, section 1, article 7, and the word "appeal" be substituted. The motion was unanimously passed.

Mrs. Alma Whitman felt that there should be an addition to the by-laws to provide for an agency that would present news of the Association to the people.

Miss Harriet Kuwamoto explained that the proposed budget provided for an Executive Secretary who would take care of keeping the public informed and sending information about the Association to its members and to nonmembers, and that the City and County of Honolulu might share in the expense of her salary.

Two motions, one to raise the dues to $5.00 and one to raise the dues to $12.00, were defeated.

It was moved, seconded and passed that the meeting be adjourned until 1:30 p.m.

The meeting of the House of Delegates was reopened at 1:30 p.m. May 2, 1947 in the Mabel Smyth Auditorium by the president, Miss Jones.

Old Business, continued.

Miss Charlotte Kerr moved that the discussion concerning the amount of the dues be reopened.

Under discussion Miss Kuwamoto further explained the proposed budget. Miss Jones stressed the need for additional funds and said that the members must decide whether they wanted a program with an executive secretary and the visit of the president to the Islands, which they had voted approval of last year, or whether they wanted a minimum program without the aforementioned things.

The Finance officer pointed out that if membership in the organization were increased to 750, there would be no deficit. Otherwise there would be a deficit of $268.00. A motion by Miss Annette Hammersland of Hawaii that the dues be made $14.00 was lost.

ACTION: Mrs. Mildred Pinner moved that an intensive membership campaign be carried on in the next six months and if at the end of that time, the budget were not balanced, that definite steps be taken to do so. The motion was passed.

New Business: The following resolutions were passed:

1. That (a) the amount of the Margaret Jones Fund capital be increased to $100,000,
 (b) that the trustees be called directors,
 (c) that "welfare" be added to the objectives of the organization in the Articles of Incorporation.
2. Regarding the work of the Legislative Committee in that it work with the P.T.A. and other organizations.
3. Urging all associations to contribute to the Blood Bank for Nurses.
4. That a letter of gratitude be written to Senator Akana and her clerk, Mrs. Elizabeth Bolles.
5. That the war records of nurses be microfilmed and put in the University of Hawaii Library of World War II.
6. That the annual convention be held in the fall of the year.
7. That the T.B. Association be thanked for their gift of books for the library.

Mrs. Thelma Hensley of the Kauai County Nurses' Association, after inquiring of the deficit in the budget, said that the members of the Kauai Association would pledge themselves to underwrite this deficit.

The Tellers Committee brought in the following results:

Vice President.....Mrs. Mildred Pinner
Secretary.....Miss Olga Larson
Trustee.....Miss Elizabeth Middleton, Kauai
Trustee.....Mrs. Esther Stubblefield
Trustee.....Mrs. Myrtle Schattenburg

As there was no further business to transact, the meeting was adjourned.

Bernice Wolf
Acting Secretary.

REPORT OF THE EDUCATIONAL COMMITTEE

1. A general survey of all the nursing schools including affiliating schools was made by a representative of the National League of Nursing Education at which time accreditation of each school was made.

2. Contacts have been made with the representatives of the radio and all publishing concerns, and permission has been granted, to make use of all for recruiting of student nurses. Arrangements are being made to carry out these plans. (This is a joint Publicity and Educational Committee project).

3. A bulletin "Minimum Standards for the School of Nursing" is in the process of completion.

4. "Choosing Nursing as a Career" pamphlet for high school students, is being set up. The Department of Public Instruction has consented to allow approximately $250.00 to help pay for this project.

5. A Pre-Nursing Club was organized at McKinley High and is very active.

6. Representatives from the various schools of nursing and Territorial Nurses' Association were asked to speak to high school girls in the different schools.

7. The Territorial Nurses' Association representatives met with the Pre-Nursing Club at Hilo High school.

8. Arrangements were also made for two student representatives in uniform, to appear before the Pre-Nursing Club at McKinley High, on "Career Day" (from each school of nursing).

9. The University Pre-Nursing Club had an "Opportunity for Nurses" day for the junior and high school students in Honolulu. Representatives from all fields of nursing were present, including a student nurse.

10. The Board has authorized a sum of money to be used for material for all the islands. All islands have been contacted as to their needs, thusly, response has only been received from the Island of Kauai.

11. The supervising principals of schools of Kauai called a special meeting of all the counselors with Territorial Nurses' Association Members asking for information, guidance, needs, etc.

12. Material from the National League of Nursing Education has been obtained for recruiting purposes. The two pamphlets available are: "Opportunities in Nursing" and "I'd Like to Know About Nursing."

13. The Territorial League of Nursing Education is in the process of being organized. The Constitution and By-Laws have been sent to headquarters for approval.

14. Enrollment in the degree curricula in nursing at the University of Hawaii. Ten nurses are enrolled in the public health nursing course for 1946-1947, including two Filipina nurses from Manila who expect to return there. Five courses in nursing education have been offered during the year and plans are made for five more to be offered in 1947-1948. More than twenty-five different nurses have been enrolled in these courses. Two nurses will receive the degree of B.S. in Nursing in June, 1947. One has been made a member of Phi Kappa Phi, an honorary scholarship society. This makes a total of three receiving the degree since it was inaugurated in 1943. Thirty-one students have been enrolled in the pre-nursing course this year.

MARY A. HUGO
Chairman.

REPORT OF THE WAGES, HOURS AND PERSONNEL COMMITTEE

In developing the economic security program, the committee has been following the procedure recommended by the ANA. This program, which was unanimously approved by the ANA House of Delegates at the Biennial, was adopted as follows:

"The American Nurses' Association believes that the several state and district nurses' associations are qualified to act, and should act, as the exclusive agents of their respective memberships in the important fields of economic security and collective bargaining. The Association commends the excellent progress already made and urges all state and district nurses' associations to push such a program vigorously and expeditiously.

"Since it is the established policy of other groups, including unions, to permit membership in only one collective bargaining group, the Association believes such policy to be sound for the state and district nurses' associations."

Although the ANA assures members of support and guidance in developing such a program, it is up to the nurses in each state to decide for themselves whether or not they want it.

The purpose of the program as given in the *American Journal of Nursing*, February, 1947, is two-fold: "(1) to secure for nurses, through their professional associations, protection and improvement of their economic security—reasonable and satisfactory conditions of employment; and (2) through accomplishing this, to assure the public that professional nursing service of high quality and in sufficient quantity will be available for the sick of the country."

In undertaking this program, the committee sought legal counsel to determine whether any changes would be necessary in our constitution or by-laws. An article for the by-laws was subsequently written designating the Territorial Nurses' Association as bargaining agent for the nurses in Hawaii. The committee then recommended to the Board of Trustees that this measure be voted upon at the annual nurses' meeting and that a copy of the article, along with an explanation of the program, be sent to each county association.

Five sub-committees were formed in the different fields of nursing (institutional, public health, industrial, private duty, school and office) to gather facts about existing salaries and personnel policies and practices. From these facts standards are being formulated for each category of nursing by the particular group of nurses who will be directly affected by them. This material will be compared with prevailing employment conditions of similar professional groups to establish our minimum standards. To do this, we will seek consultation from an expert in the field.

If accepted by the Territorial Nurses' Association, these minimum standards could serve as a basis for making recommendations to employers of nurses, or even to negotiate through collective bargaining if necessary.

In order for our economic security program to function successfully, its goals and activities must be interpreted and widely publicized to association members, employers of nurses, and to the general public by a sound educational and public relations program.

ELISABETH BOEKER
Chairman.

REPORT OF THE BOARD FOR THE LICENSING OF NURSES

In a resolution passed at its 15th Annual Convention the Nurses' Association asked to be kept informed of the progress of the Board for the Licensing of Nurses. In line with this request, a member of the Board accompanied Miss Josephine Valentine to each of the islands where meetings were held with the District Association members. Several accounts of progress have appeared in the *Inter-Island Nurses' Bulletin.*

Licensing of practical nurses in accordance with the revised Nurses' Practice Act was started early last year. According to an interpretation of the Attorney General's office, the following persons must be licensed regardless of title:

The Nurses' Practice Act 103 S.L. 1945 requires that the following persons be licensed to practice in the Territory of Hawaii:

a. Persons who perform for hire any or all of the following duties in homes, hospitals, nursing homes and other institutions under the supervision of a doctor or a nurse: Making occupied bed; bathing a bed patient; dispensing and collecting bed pans and urinals; feeding a patient; taking temperatures; doing simple dressings; transporting patients under anesthesia without assistance; giving enemas or any other treatments.
b. Persons who perform for hire any or all of the following duties in dispensaries, out-patient clinics or physician's offices: Taking temperatures; applying dressings and bandages; giving medications or treatments as ordered by the physician; interpreting doctor's orders to patient; caring for or accompanying post operative patients to home or hospital.

As applications came in, it was evident that few requirements could be set for licensing if service was to be maintained in hospitals. Under an emergency clause in the Nurses' Practice Act, the Board waived stated requirements as to age, examination and training and are licensing all who apply for licenses who are 18 years of age, have had six months' experience and are recommended by three employers or supervisors. To date 317 practical nurses have been licensed.

The next problem of the Board was to develop training facilities for practical nurses. An advisory committee was appointed with Mrs. Gardner Black as chairman. This committee has formulated minimum standards for schools for practical nurses in the Territory which the Board has adopted. This committee, with the Council on Community Nursing, has also been active in surveying facilities and studying plans for organizing a school in Honolulu. The result is that funds to establish a school for practical nurses have been included in the budget requested by the Vocational School of the Department of Public Instruction. If that budget is allowed, actual organization of a school will

take place. The committee is now formulating a manual for Directors of Schools for Practical Nurses.

Lack of understanding on the part of employers, especially physicians who employ practical nurses in their offices, has shown the need for explanation of the reason for licensing and for information regarding the groups of workers which should be licensed. We hope all registered nurses will help in the interpretation of licensing requirements for practical nurses.

Miss Josephine Valentine, formerly a member of the Board of Nurse Examiners of New York State was brought to the Territory for three months last September. Miss Valentine surveyed each of the nursing schools and their affiliating programs. Upon her recommendations following the surveys, the Board approved the schools of nursing at Queen's, St. Francis and Kuakini Hospitals. Recommendations were made to each school which will be considered by the Board in continuing the approval of the school. An advisory committee, with Miss Mary Hugo as chairman and including members from the faculties of the schools and their affiliating programs, worked with Miss Valentine and the Board to formulate standards to be required by the Board for approval of schools. This Committee's report is now under consideration by the Board and will soon be available for the guidance of schools.

Miss Valentine, accompanied by a member of the Board, and Miss Draper, chairman of a special committee of the Nurses' Association to study facilities for a psychiatric affiliation, visited Kaneohe Hospital, upon the invitation of Dr. Guensberg, Medical Director, and Mr. Vance, Director of Institutions. Miss Valentine was enthusiastic about the opportunities for student affiliation at the hospital if the Director's plans for expansion in facilities and personnel are made possible by the Legislature. The Board and the Legislative Committee of the Nurses' Association have been active in making recommendations as to requirements for an affiliation program and in supporting the hospital's budget request in the Legislature.

It became evident, early in the attempts to implement the revised Nurse Practice Act, that the Act was not clear, and in some instances not adequate to assure the Board the authority it needed. An Advisory Committee on Legislation, with Miss Dorothy Blank as chairman, formulated an entirely new law for presentation to the Legislature. You have heard Miss Blank's report. The present proposed amendments make four major changes. They provide for increased license fees of from $5.00 to $15.00 for registered nurses and of from $5.00 to $10.00 for undergraduate nurses in order that a well qualified person can be employed at least periodically for surveys of schools and counsel to the schools and to the Board as Miss Valentine served last year. The amendments provide for only nurse membership on the Board, eliminating the physician members now required. The revision also lowers the age at which practical nurses may be licensed from 20 to 19 years. They also provide for an inactive list of nurses, upon which with proper notification, the inactive nurse may be placed and not required to pay the annual registration fee until active in nursing again. Other amendments clarified requirements and functions of the Board by restatement or reorganization of material. The promotion of the legislation has been turned over to the Legislative Committee of the Nurses' Association, Territory of Hawaii, whose report you have heard.

The Board's next task is the revision of blanks used in applying for examinations and licensing and in the surveying and accrediting of schools and revising policies and procedures used in relation to these activities.

Examination questions from the Test Pool of the National League of Nursing Education were used for the first time at the October and April examinations. The question sheets with directions are sent to the Board which supervises the examination. The examinations are then returned to the N.L.N.E. for grading and scoring. The scores and their interpretations are returned. When this plan has been developed further it will be possible to compare the achievement of the Territory's graduates with those of the country as a whole. Not the least advantage is that Board members no longer need to make up the questions and grade the papers.

During the year from July 1946—to date:

Number of students taking examinations..... 66

Number of registered nurses licensed by examinations 50

Number of registered nurses licensed by reciprocity 349

The Board held 16 meetings during the year with individual members holding additional conferences with committees and individuals.

It has been a busy and satisfying year, with much more needing to be done than the Board can do without a paid qualified educational secretary.

VIRGINIA A. JONES
Chairman.

REPORT OF THE NURSING SERVICE BUREAU COMMITTEE

Review of activities of Nursing Service Bureau from April 1, 1946 to March 31, 1947, inclusive:

	March 31, 1946	March 31, 1947
Membership of Registered Nurses	82	118
Membership of Practical Nurses	33	27
Physicians' Exchange Membership....	41	47

November 15, 1946—the 11-7 night nurse was discontinued.

January 1, 1946—Number of Nursing Office Staff: 4 full time nurses —1 relief nurse
June 1, 1946—Number of Nursing Office Staff: 3 full time nurses—1 relief nurse
November 15, 1946—Number of Nursing Office Staff: 2 full time nurses—1 relief nurse
March 31, 1947—Number of Nursing Office Staff: 2 full time nurses —1 relief nurse

January 1, 1947 the private duty rates were increased from $9.00 for 8 hour duty to $10.00 for 8 hour duty.

Mrs. Ethel Brown left the Nursing Service Bureau May 31, 1946 to accept another position.

The Margaret Jones Memorial fund loaned the Nursing Service Bureau $4,000.00 in August, 1945 and this loan was paid back without interest in August, 1946.

March 31, 1947—Cash on hand—Nursing Service Bureau.....$1,258.53
March 31, 1947—Cash on hand—Physicians' Exchange..... 1,478.39

Total.....$2,736.92

November, 1946 the Honolulu County Medical Society agreed to pay the difference in the income from the Physicians' Exchange, each month, up to the amount of $500.00. The amount of the monthly income from the Physicians' Exchange varies as some physicians pay their bills every three months.

Problems confronting the committee:

A. Inability to fill calls: There were 952 unfilled calls and 2,532 filled calls making a total of 3,484 calls for

the year. Some of the nurses refuse to work at certain hospitals and on the afternoon and night shifts.

B. The financial status seems stable at this time.

Recommendations:

A. The policies relating to the private duty nurse and the registry should be reviewed and revised to meet the present needs.

B. The committee recommends that the above policies be printed in booklet form and be given to prospective private duty nurses when they first register in the Territory.

C. An attempt should be made to set up a nurse counselling service where nurses may come with their grievances.

D. The committee recommends that all nurses work an 8 hour day, except in dire emergency.

E. A set of policies governing the activities of the personnel of the Nursing Service Bureau should be set up with the goal of a 40 hour work week as soon as possible, and that adjustments be made in salaries according to the prevailing practices.

ESTHER M. STUBBLEFIELD
Chairman.

REPORT OF THE LIBRARY COMMITTEE

A resolution stating:

> WHEREAS, we believe that it would be of assistance to both prospective student nurses and registered graduate nurses desiring postgraduate study to have a central source of information regarding nursing schools and available postgraduate courses, and
>
> WHEREAS, there being no such source available; therefore be it
>
> RESOLVED, that the Library Committee of the Nurses' Association, Territory of Hawaii, be requested to make arrangements with the Librarian to collect and make available such information,

was passed at the last annual meeting. This Resolution has been carried into effect.

During this year literature on nursing schools and postgraduate courses has been placed on file in the library. Eleven books on tuberculosis nursing texts have been purchased by the Tuberculosis Association of Hawaii and added to the library. Now texts have been purchased periodically and magazine subscriptions renewed. The Library Committee is anxious for your suggestions as to choice of new books.

The sum of $500.00 from the Margaret Jones Memorial Fund has been added to the Nurses' Association, Territory of Hawaii, library fund to be used for library upkeep ($100.00 per year), books and magazines. An agreement was made last year to give $5,000.00 to the Honolulu County Medical Library Endowment Fund. The plan was to give at the rate of $500.00 a year for 10 years. The Board of Trustees, Nurses' Association, Territory of Hawaii feel that a study of present plans of the Endowment Fund Committee should be made before proceeding with the above agreement.

A "postal" library service is in effect to aid the nurses of other islands in procuring texts. We are anxious to have the delegates of other islands convey this message to the respective counties.

DOROTHY C. BLANK
Chairman

REPORT OF THE MARGARET JONES MEMORIAL FUND

The following is the annual report of the Margaret Jones Memorial Fund.

On December 31, 1946 the Margaret Jones Memorial Fund had on account a net credit of $6,701.00.

A gift of $500.00 was made to the Medical Library, and a loan of $300.00 was granted for educational purposes in 1946.

The income of the Margaret Jones Memorial Fund is not large. Mr. Kellerman, our agent, estimates that the income is around $1,000.00 a year.

With the view of keeping the fund intact and of increasing its income, the committee makes the following recommendations:

1. That $5,000.00 of the net credit of $6,701.00 be transferred to the fund's Savings Account.

2. That it be decided what part of the fund will be capital and what part will be credit. We recommend that savings be included as part of the capital.

3. Because loans in the past have involved sale of securities thus reducing our capital, we recommend that future loans be made within the income level of the fund.

MARGARET MAKEKAU
Chairman.

REPORT OF THE SPECIAL INVESTIGATING COMMITTEE FOR THE MARGARET JONES MEMORIAL FUND

The committee met with Mr. Kellerman of the Bishop Trust Company on March 24, 1947. Mr. Kellerman reported and recommended the following:

1. Determine what your capital is and how much capital the fund has. (Suggested we earmark capital as being all securities now owned plus $5,000.00. At present the $5,000.00 is not invested).

2. The Trust Company suggests we transfer $5,000.00 to the savings account because it is not being used, and in a savings account it would earn interest. This $5,000.00 should be designated as part of the capital thus increasing the size of the trust fund.

3. $1,000.00 is the estimated income per year from the capital.

4. On March 15, 1947 we had a credit of $6,900.00 cash.

5. We should maintain a revolving fund of about $1,000.00.

6. A trust fund is a growing thing and should be increased as much as possible from year to year.

ESTHER M. STUBBLEFIELD
Chairman.

ANNUAL REPORT OF WAR RECORDS DEPOSITORY, 1946

The War Records Depository Library has requested that the records of the nurses' activities during the war years be filed or microfilmed and filed with the rest of the World War II records at the University of Hawaii.

The object is to have the nursing activities pre- and post-Pearl Harbor made more widely known to the general public; a permanent record to be included in the whole picture of the war activities in the Territory of Hawaii.

These records will be available to the general public as well as to all nurses.

The records of the activities of the nurses which are filed in the Nurses' Association, Territory of Hawaii

files, Honolulu, have been received and recommendations sent by letter to the Directors of the Nurses' Association, Territory of Hawaii, regarding the filing of these records with the War Records Depository Library of the University of Hawaii.

Since most of the articles are about the war activities on Oahu, it is the suggestion of the committee that a complete record of the nurses' activities, citations, photographs, letters, etc., on the other islands, Hawaii, Maui, Molokai and Kauai be sent in by their respective associations to the Nurses' Association, Territory of Hawaii War Records Committee to complete the nursing picture.

The records of the war activities of the Nursing Service Bureau are now being compiled.

It is the plan to obtain reports on experiences of nurses in convoy duty, in First Aid Stations and on overseas duty.

Norma W. Robinson
Chairman.

REPORT OF THE BULLETIN COMMITTEE

For the Year 1946

With the November-December 1946 issue of the *Bulletin* the trial period of publication with the Hawaii Medical Journal was successfully completed. Until further notice we will pay the regular rate of $2.00 per year per member to continue this publication privilege.

The *Bulletin* has been received favorably, not only by members of the Nurses' Association and the Medical Society, but also from afar as evidenced by letters of commendation, comments in newspapers and magazines, and requests for reprints of some of the articles published. No adverse comments have as yet been referred to the Bulletin Committee orally or in writing. They would be welcomed, incidentally, because in their absence we will proceed to the best of our ability, comfortable in the belief that all is well.

One meeting of the Honolulu Committee members was held in June to discuss general plans for future issues of the *Bulletin* as well as the calendar sales project offered by the Medical Society as a source of revenue for 1947 expenses. The County Associations were advised of the proposal by letter and all responded promptly assuring cooperation. The sale has netted some $600.00 towards the estimated 1947 expenses and the Kauai Nurses' Association has earned special commendation by the sale of 400 calendars. At this time I should like to announce that the Territorial Association will be given the opportunity to raise funds in 1947 through the same project if so desired. If this is accepted I feel it should be handled by the Finance Committee or a Special Committee, as there is sufficient work entailed in preparing material for the *Bulletin* without the additional burden of raising funds for its operation. The association will receive credit for any acceptable advertising secured for the Hawaii Medical Journal, but this too entails a great deal of work and should be assigned to others than members of the Bulletin Committee. I personally feel it advisable to pay for the *Bulletin* from the general fund, and if this is not possible to assess each member for the amount needed. After all, we are a business organization.

It is to be hoped that the County Associations will be able to participate more thoroughly in the future so that the *Bulletin* will carry a true representation of all the phases of nurses' activities in our Islands. We want to know what our Hawaii nurses are doing and thinking, and the *Bulletin* should be the medium of expression. So members, please give us your ideas and opinions in writing—send in your articles—tell us what you want in the *Bulletin*.

Before closing I feel that it might be of some interest to explain the origin of the Bulletin Committee. Its existence and operation derive from the Constitution and By-Laws. The editor and associate editor are appointed by the president, and the secretary of each County Association automatically becomes a member. Each County Association is free to appoint its own committee as it sees fit to work with the Bulletin Committee, but unless the Territorial Bulletin Committee is kept informed of such appointments by the County Associations, the individuals who are doing the necessary work do not receive proper recognition. The business of maintaining a high standard publication means lots of work and lots of cooperation. May I at this time appeal for such cooperation on the basis of the returns that will accrue to each member of the Association?

I wish to express appreciation to those who have assisted me during my own trial period as editor. Mrs. Bennett, Managing Editor of the Hawaii Medical Journal, has been extremely kind, patient and helpful. The fact that she handles all the business arrangements in publication means a great saving of time and energy to the Bulletin Committee. Also my thanks go to all who participated in the calendar sale. It is my sincere hope that the *Bulletin* will be a publication of which we all can be extremely proud.

Violet Buchanan
Editor.

ANNUAL REPORT OF THE SECRETARY NURSES' ASSOCIATION OF THE COUNTY OF HAWAII

January 1, 1946 to December 31, 1946

Meetings During the Year:

The Annual Meeting of the Nurses' Association of the County of Hawaii was held at the Nurses' Cottage at Puumaile Hospital January 8, 1946 at 7:30 p.m.

Besides the Annual Meeting with an attendance of seven members and one guest, seven regular meetings were held with an average attendance of 17 members and four guests. The largest attendance was in March with 24 members and seven guests present.

With the exception of the June picnic meeting and the December Christmas meeting at Puumaile's Nurses' Cottage, the others were held at the Hilo Hotel as noon luncheons.

The first year of peace since 1942 made many of our nurses travel-conscious. Our President left for the Mainland in the fall, and attended the Atlantic City Convention of the American Nurses' Association. Miss Jacobson was voted to the Vice-Presidency due to Kahiwa Lee resigning to live in Honolulu, and then was acting-President for the remainder of the year.

The treasurer, Miss MacDonald, resigned in May, also to travel, and Miss Bess Hammer was elected to fill the unexpired term of treasurer.

The April tidal wave disaster made it imperative to cancel our April meeting. The destructive heavy seas

[A summary of records on nursing activities in relation to the war is available on request.]

of the first week in January forced us to cancel our January annual Banquet, and coming so close to the end of the year, seems part of our unsettled meeting programs throughout 1946, to which reconversion to peacetime after our many years of war, and the changing about of nurses, have contributed no small amount also.

Activities:

The President, Josephine Hall, was sent to Honolulu as delegate to attend the Territorial Convention. Due to Miss Hall's willingness to accept transportation expense only, Eunice Graham was elected as the second delegate. Winifred Golley, May Gunnerud and Bess Hammer, who were also attending the Convention for the Board of Health, acted as voting delegates to bring our delegates to the accepted number of five allotted this year. The delegates brought back thorough and interesting reports of the highlights of the Convention.

The Hawaii Community Council was organized in Hilo. Mary Stanley and Thelma Patten were appointed to represent the Nurses' Association. Thelma Patten was elected to the Board of Trustees of the Hawaii Community Council, but after a few general meetings and two Trustee meetings the Council disbanded due to too many difficulties involved.

The By-Laws were amended to increase the annual dues to $10.00 a year because of the Territorial increase.

Contributions were sent to the Philippine Island Health Bureau at Manila through the president's acquaintance with the Chief Nurse there and the knowledge of their great need for whatever we might be able to spare. A Committee was set up and continues to function, for the purpose of a fitting memorial to Jane Service. Miss Service, a charter member of the Nurses' Association of the County of Hawaii, developed and supervised the Nurses of the Board of Health of the Island of Hawaii for many years, and was a valued and esteemed member of our Nurses' organization since its inception, February 23, 1927.

Miss Service lost her life in the April tidal wave which brought devastation and sorrow to Hilo that exceeded our war burden. A Jane Service Memorial Nurses' Library is under way, and will be at the Hilo Memorial Hospital until the new County Library is built. Old copies of the *Nursing Journal* were bound and are being kept up to date as part of the memorial.

Hilo Medical Service Association set-up was considered in November, and further details with reference to how they can be of service to the Nurses' Association will be taken up early this year.

Talks about their Mainland trips were given by various members who had returned. These talks were expressive of the nursing conditions encountered throughout the States, leaving a definite feeling that Hawaii was not alone in problems, and perhaps closer to an ideal place to work after all.

Membership:

January 1, 1946 there were 45 paid-up members and six honorary members making a total of 51 members on the roll. This year five were transferred in, one reinstated, 11 new members accepted, while 11 have been dropped due to delinquent dues or having left, without transfers. Six transferred out, and one died, leaving a total paid-up membership of 45 and an honorary membership of five.

We hope that a new membership campaign can be instigated this year so that we can show a gain. It was suggested that each member bring in a new member in order to acquaint the many new nurses among us with our organization, as well as our benefiting from their new ideas and varied experiences.

I wish to extend to each and all of you my Aloha for the many kindnesses shown to me, and sincere thanks for the very numerous expressions of appreciation that have been so unstintingly extended to me during the four years that it has been fun sticking my neck out for work (and I'm not forgetting that there has been as much fun as work). I am sure there are other ways I can be useful to the Association this coming year, and if you don't "lay it on too thick" I shall try to be of help. With sincere wishes that 1947 will give us opportunities to develop into an organization that will become a strong community unit and of great benefit to the individual nurse who is truly facing an era of change and confusing problems.

THELMA PATTEN
Secretary.

REPORT OF KAUAI NURSES' ASSOCIATION, COUNTY OF KAUAI

The following programs were held throughout the year of 1946:

The April 1 meeting was held at the Wilcox Hospital Nurses' Home. A round table discussion of the meetings of the Territorial Nurses' Association Convention was given by the attending delegates. Punch and cookies were served by the hostesses.

On May 6, the meeting was held at the Makaweli Club House. Dr. Alice Allen gave an enlightening talk on the "Importance of Being Different." An informal discussion of Dr. Allen's work in the schools of Kauai followed. A delicious dinner was served by the hostesses.

The Wilcox Poipu Cottage was the scene of the annual picnic. A hekka dinner was served by the Committee; Hawaiian music and hulas followed.

The subject of the September 9 meeting held at the Wilcox Nurses' Home presented an island social problem, in which the Kauai Nurses' Association might participate. "The Ideal Home for the Aged and Chronic Aged" was given by five members of the association and covered the following phases: (1) The need for a home for the chronic aged; (2) ideal physical plant; (3) nursing problems; (4) occupational therapy; and (5) Kauai's proposed plans for such a home.

The October 7 meeting was held in the library of the Wilcox Hospital. A movie on child development titled "Life Begins" was shown followed by comments by Dr. Alice Allen. This was an extremely well presented film and both film and comments were most instructive and well enjoyed.

A special meeting was held on October 25, at Miss Mabel Wilcox's residence. The association entertained important visiting guests—Miss Virginia Jones, President of the Territorial Nurses' Association and Miss Josephine Valentine of New York, a representative of the American Nurses' Association. Following a delightful tea served by the hostess, Miss Jones gave a report of the members on business to date of the Territorial Nurses' Association and plans for closer unity of the Territorial Nurses' Association and outside island Associations. Then Miss Valentine explained her mission in Hawaii. At the request of the Territorial Association Miss Valentine aided in setting up the course for the new "Practical Nurse Licensing Law" passed

at the last Legislature. Miss Valentine gave a concise and enlightening talk on the aspects of this law and keen interest was shown by the members.

The November 4 meeting was held at the Kekaha Health Center. Tea and cake was served by the hostesses. A forum on the following topic followed: "The American Nurses' Association as Collective Bargaining Agent for Nurses," presented by four of the Association members. Interest was slow but eventual heated argument followed. This led to a special meeting.

On November 18 a special meeting was held at the Wilcox Nurses' Home to formulate recommendations to the Territorial Nurses' Association on the subjects of important interest to the island associations.

The Christmas Party, December 16, held at Mahelona Hospital's new recreational hall, was a fitting climax to this year's meetings. Christmas decorations prevailed and a lavish tea was served by the hostesses. A double quartet of high school students, directed by Miss Bilsborrow, rendered Christmas music, and Miss Lou Berg read a Christmas story. The party was thoroughly enjoyed by guests and members alike.

ELVIA MANLEY
Secretary.

REPORT OF MAUI COUNTY NURSES' ASSOCIATION

The Maui County Nurses' Association dates back to February 15, 1935, when an eager group of Maui nurses met at the Malulani Hospital to discuss the matter of forming a County Nurses' Association. Much credit for its inception should go to Agnes Clancy who was the public health nurse supervisor of the County of Maui at the time and also to Mrs. Miriam Crabbe Schmidling. Mrs. Schmidling has held the post of treasurer since 1936.

The Association has been active in both nursing and non-nursing activities. It made many contributions to different projects and organizations in the community and territory. The association has sponsored many educational programs for its nurses. Meetings were held monthly up to 1942. During the war years, due to the many restrictions, meetings were held only two or three times a year. Like everything else, the Association has returned to its peacetime standing. There were ten meetings held in 1946. An all-out membership drive was held and today the Maui County Nurses' Association boasts of 55 paid-up members.

The Association's annual meeting and dinner was held at the Wailuku Hotel Gardens, February 22, 1946.

The Association, through its members, collected and sent both clothing and books to the nurses in the Philippines and in Europe. A sum of $100 was given to the Hale Makua, an Old Men's Home, on the Island of Maui. Likewise $50 was given to the Jane Service Memorial Fund.

A very successful white elephant sale was held in April, 1946 and a large sum of money was realized.

The following people gave interesting talks to the Association members during the year:

1. Miss Janice Mickey of the Territorial Board of Health gave an interesting talk on the work being done in Child Development in Rochester by Dr. Aldrick in cooperation with the Mayo Foundation.

2. Miss Valentine and Mrs. Gage spoke to the members on the nurse practice act and practical nurses.

3. In November, 1946 Miss Rae Barner, Premature Nursing Consultant with the Territorial Board of Health showed a movie and gave a talk on the "Care of the Premature Infant."

The Association completed a very successful 1946. Here in this group we have three delegates whose expenses are being taken care of by the Association.

L. D. WONG
Vice President.

HAWAII COUNTY NURSES' ASSOCIATION NEWS

The Jane Service Library Fund, a memorial to Miss Jane Service, retired Supervisor of Public Health Nurses on the Big Island, who died in the tidal wave of April 1, 1946, has been started by the contribution of $50.00 from friends. A plaque is being made up from Miss Service's training school pin which will be placed in the library when completed. The local committee asks that contributions in the form of books on nursing and medicine be given in memory of Miss Service. Persons wishing to contribute should contact Miss Roberta Lindberg, c/o Hilo Memorial Hospital or Miss Jettie Jacobson, 1289 Waianuenue Avenue, Hilo.

Mrs. Dorothy Moll has resigned her position with Dr. Brown and has left for the Mainland to make her home. Miss Clara Mitchell and Miss Mary E. Stanley left May 2 for an extended vacation. They will join Mrs. Moll in San Francisco and the three of them will motor across the country to New York where Miss Stanley will visit her family and friends. Mrs. Moll and Miss Mitchell will leave for Europe, visiting in England, Italy and Switzerland. Miss Mitchell and Miss Stanley will return to the Big Island some time in September.

The Big Island Nurses were well represented at the Territorial Nurses' Association convention this year. Those attending were Miss Jettie Jacobson, Miss Roberta Lindberg, Miss Josephine Hall, Miss Margaret Barnett, Mrs. M. Wright, Miss Whitney, Mrs. Thelma Patten, Mrs. May Gunnerud, Miss Laura De Shazo, Miss Trujillo, Miss Sinclair, Miss Eleanora Seyrup and Miss Annette Hammersland.

Mrs. Ethel McGuinness, who has been industrial clinic and visiting nurse for the past 18 years at Waiakea Mill Company, has resigned her position as of June 1, 1947. She is being replaced by Mrs. Sally Hall.

Miss Winifred Golly, Supervisor of Public Health Nursing on the Big Island, is enjoying a two months' vacation on the Mainland.

In honor of Florence Nightingale's birthday, designated as National Hospital Day, nineteen students from Konawaena school were to visit Kona Hospital, distributing fruit and flowers to the patients. Nurses in the Kona area observed the day as they have for the past four years, with a prayer service, followed by lunch at Kona Inn, Sunday. Bishop Harry Kennedy, of Honolulu, and Father Burton Linscott, of Kona, officiated at the services held at 10:30 a.m. at Christ's Church of Kealakekua. Nurses participating included Miss Ruth Oian, Miss Helen Gorsch, Mrs. Rose Von Doren, Mrs. Louise Wilson, Miss Ruth Baldwin, Miss Ruth Koch, Miss Vera Gore, all of Kona Hospital; Miss Josephine Hall and Miss Gertrude Finnimour,

public health nurses; Mrs. Elsa Chillingsworth, sight conservation worker; Mrs. Marjorie Van Noy, Konawaena school; Mrs. Nell Magee, Konawaena school nurse; Mrs. Sadie Seymour, Mrs. Irene Vredenburg, Mrs. Glenna Ewing, Mrs. S. Nakamura and Mrs. Mildred Ushiroda, all retired.

NOTICE

April 16, 1947

Nurses Registered in Montana:

We call your attention to this provision in the new law:

"Any person holding a license or certificate of registration to practice nursing in Montana as a registered nurse authorized by any prior board and issued by the Governor, which license is valid and *for which fees have been fully paid on July 1, 1947,* shall thereafter be deemed to be licensed as a registered nurse under the provisions of this Act."

This means that if your license is not in good standing, the renewal fees which are delinquent must be paid by July 1, 1947 in order that you may be licensed under the new Act.

If you have not paid the renewal fee for 1947, write the Board of Examiners for Nurses immediately for information regarding the status of your Montana license.

Montana State Board of Examiners for Nurses,
State Capitol, Helena, Montana.

From: National Society for the Prevention of Blindness, 1790 Broadway, New York 19, N. Y.

The National Society for the Prevention of Blindness announces the appointment of Marguerite M. Furey, R.N., as Consultant in Nursing Activities. Miss Furey comes to her new post from the Westchester-Pelham Health Center of the New York City Department of Health, where she was District Supervising Nurse.

After starting her nursing work as supervisor of nurses in the Lenox Hill Hospital, Miss Furey did generalized public health nursing with the New York City Department of Health, later becoming nurse epidemiologist.

Miss Furey has had supervising experience in a tuberculosis teaching project, jointly conducted by the Rockefeller Foundation, New York City Department of Health and Cornell Medical School. She has also had field supervising experience in the Lower East Side Health Center.

She received her B.S. degree from New York University and her basic nursing education at Lenox Hill Hospital in New York City.

MAUI NEWS

Mrs. Martin is retired after 25 years of service:

Mrs. Molly Martin, the district nurse of Keahua, will soon be pensioned after a long untiring service of twenty-five years in this community. She is now on her terminal vacation. Mrs. Martin came to the Territory from her native country, Canada, about 35 years ago, and was with the Queen's and the Hilo Memorial Hospital in the early years of her arrival. Ever since 1923 she has been connected with the Paia Hospital of the M. A. Co. and has been in charge of the Keahua dispensary. Mrs. Martin replaced Mrs. Foster Robinson who resides in Kula. Since the closing of the dispensary, arrangements have been made to carry all patients from Pulehu, Keahua and Kailua with a bus that makes a daily trip to the Paia dispensary as well as to the hospital.

Mrs. Martin lives with her only son, Donald, who was recently discharged from the Navy, and her plans are indefinite as to what she will do. In spite of her way past pensioning age, she looks fine and keeps herself occupied with various interesting hobbies such as wood carving and painting and still finds time to tend to her gardening as well as to her well-earned rest. The long faithful years of work during her nursing career have brought much happiness and comfort to the patients and the people of this community. Her kind services rendered have been well appreciated and shall always be well remembered.

Mr. Martin had also been employed by the M. A. Co. as timekeeper. He passed away in February of last year.

The first 1947 meeting of the Maui Nurses' Association was held at the Kula Sanatorium Nurses' Home. The following were elected as officers for the new year:

President.....Miss Elizabeth Sheridan
Vice President.....Mrs. Laura Wong
Secretary.....Miss Dorothy Kirschnir
Treasurer.....Mrs. Miriam Schmidling
Board of Directors.....Mrs. Molly Martin, Miss Rose Littel, Miss Esther Watanabe
Committee Chairmen:
Entertainment.....Mrs. Margaret Kinney
Membership.....Miss Rose Littel
Publicity.....Miss Esther Watanabe

Three members were chosen as delegates to the Territorial Nurses' Convention held in Honolulu in early May. They were: Miss Elizabeth Sheridan, Mrs. Laura Wong, Miss Esther Watanabe.

On April 11, the association held its first social gathering of the year with a buffet supper followed by a white elephant sale and card party. A good time was had by all, and the white elephant sale proved to be a great success. The highlight of the evening was the presentation of beautiful carnation leis to three retiring nurses. Mrs. Molly Martin has been with the Maui Agricultural Company for twenty-five years. Miss Alice Husband, who has been with the Puunene Hospital for twenty-five years, is returning to Australia. She was greatly beloved and will be missed by all. Mrs. Corine Freeman, who was one of the original organizers of the Maui Nurses' Association was also given acknowledgement of her services. She was with the Puunene Hospital for 16 years.

Personal News:

Mrs. Mildred Y. Ikeda has left the Malulani Hospital staff to join her husband in Japan.

Miss Esther Berger, former head nurse at Paia Hospital, has left for the Mainland.

Mrs. Lolita B. Coughlin has been appointed as the new head nurse at the Paia Hospital. She is well known on Maui where she served throughout the war as executive secretary of the Office of Civilian Defense.

Two new nurses have been added to the Paia Hospital staff. Miss Pauline Jacobs is a graduate of the University of Iowa School of Nursing. A local girl

from Spreckelsville is Miss Sayo Hashizaki, who is a graduate of the School of Nursing of Boulder, Colorado.

Misses Mildred Bane and Barbara Durbin are newcomers to Kula Sanatorium. Both are graduates of the Los Angeles County Hospital.

Mrs. Grace McGrill, retired, formerly with Puunene Hospital, who resides at California, was a visitor of Mrs. Corine Freeman.

Miss Betsy Boylin has been appointed to the Honolulu Department of Public Health Nursing. She has been a very active member of our association and we regret her leaving. We wish Miss Boylin much happiness and success in her new appointment.

The new Supervisor of the Maui Public Health Nursing Department is Miss Neva N. Harris. She was previously connected with the Iowa State Health Department for six years.

The PHN department has also had three new nurses on the staff. Miss Mildred Manty finished her PHN work at Simmons College. From Rexburg, Idaho, comes Miss Margaret Barnes. Miss Elizabeth Flagge is a graduate of the Medical College of Virginia. She worked in New York for five years before coming to Maui.

The PHN department regrets the leaving of Miss Nancy Hussey who will enter the Sacred Hearts Convent in Honolulu. She has been with the PHN department for eleven years. We wish her a great deal of success and happiness in her new venture.

E. A. Watanabe.

* * *

NEWS FROM OAHU

Shriners' Hospital for Crippled Children:

Charlotte Mathewson (Rhode Island Hospital, Providence, R. I.) sailed May 3 for New York, by freighter via South America and the Panama Canal. Miss Mathewson was day supervisor at Shriners' Hospital for Crippled Children for two years. Other nursing positions held in Hawaii were: Wahiawa Hospital, OCD Red Cross, Shingle Memorial Hospital, Molokai and Lanai City Hospital, Lanai.

Harriet Baker (St. Helena Sanatorium and Hospital Training School, California) returned May 6, after completing a four months' post graduate course in ward supervision at Pacific Union College, Angwin, California. Miss Baker will be ward supervisor and nurse-anesthetist at Shriners' Hospital for Crippled Children. She received her training in anesthesia at Columbia Hospital, Milwaukee, Wisconsin.

Leahi Hospital:

Leahi Hospital welcomed a number of new staff nurses during April and May. They are:

Miss Petra Aherrera (Baguio General Hospital, Philippines; Maryknoll College, Philippines).

Miss Dolores A. E. Christl (B.S. College of St. Catherine, Department of Nursing, St. Mary's Hospital Unit, Minnesota).

Miss Helen Jean Cosper (St. Joseph's Hospital, Tennessee; B.S. George Peabody College for Teachers, Tennessee).

Miss Esther Gines (Mary J. Johnston Hospital, Philippines).

Miss Peggy Hayes (B.S. College of St. Catherine, Department of Nursing, St. Mary's Hospital Unit, Minnesota).

Miss Drucilla Hearle (Montreal General Hospital, Canada).

Miss Anna M. Johnson (Edward W. Sparrow Hospital, Michigan), Army Service.

Mrs. Pureza R. Languisan (Philippines General Hospital, Philippines).

Miss Linnie Bell McGrew (Charity Hospital, Mississippi).

Miss Kay K. Minamoto (St. Francis Hospital, Honolulu, T. H.).

Miss Agnes A. M. Wiggins (Edward W. Sparrow Hospital, Michigan), Army Service.

Another two months' course in Tuberculosis Nursing for graduate nurses will begin July 1, 1947, with four applicants.

About forty-three attended the reunion party for all former student nurses held on May 22, 1947, in the garden of the Nurses' Home. The guests were served a buffet supper; group singing, games and dances were enjoyed by all.

Miss Violet L. Buchanan, Medical Librarian and Editor, on leave, of the *Inter-Island Nurses' Bulletin,* has written friends at Leahi from Mexico and New Orleans.

Queens Hospital:

Miss Mildred Shizue Asato (Queen's Hospital School of Nursing, Honolulu) departed by air on May 12, 1947 for Detroit, Michigan, to study communicable disease nursing. She has been awarded a polio scholarship by the Honolulu Chapter, National Foundation for Infantile Paralysis, and will also spend some time at the Georgia Warm Springs Foundation, before returning to Hawaii.

Twenty-one graduated from the School of Nursing on June 20, at Mabel Smyth Memorial Building.

The Queen's Hospital Alumnae Association held its May 24 meeting at Waioli Tea Room, 2:30 p.m. with Miss Mildred McFerren, Director of Nursing Service, Queen's Hospital as speaker. About forty members were present to discuss the present curriculum of the Queen's Hospital School of Nursing. A June banquet honored recent graduates.

St. Francis Hospital:

Miss Anna Fisher (B.S. Washington University, School of Nursing, Missouri; M. S. University of Chicago, Illinois) has recently been appointed Educational Director of St. Francis Hospital School of Nursing.

Miss Bernadette Yoshina (St. Francis Hospital School of Nursing) has completed a three months' course for graduates in the care of premature infants at Johns Hopkins Hospital, Maryland, and another three months' course at the University of Chicago. The latter was made possible by a scholarship from Children's Bureau through the Maternity and Child Health Association.

The St. Francis Hospital Alumnae Association held a dance in honor of graduates of the School of Nursing at Honolulu Elks Club on May 24.

Elsie Ho.

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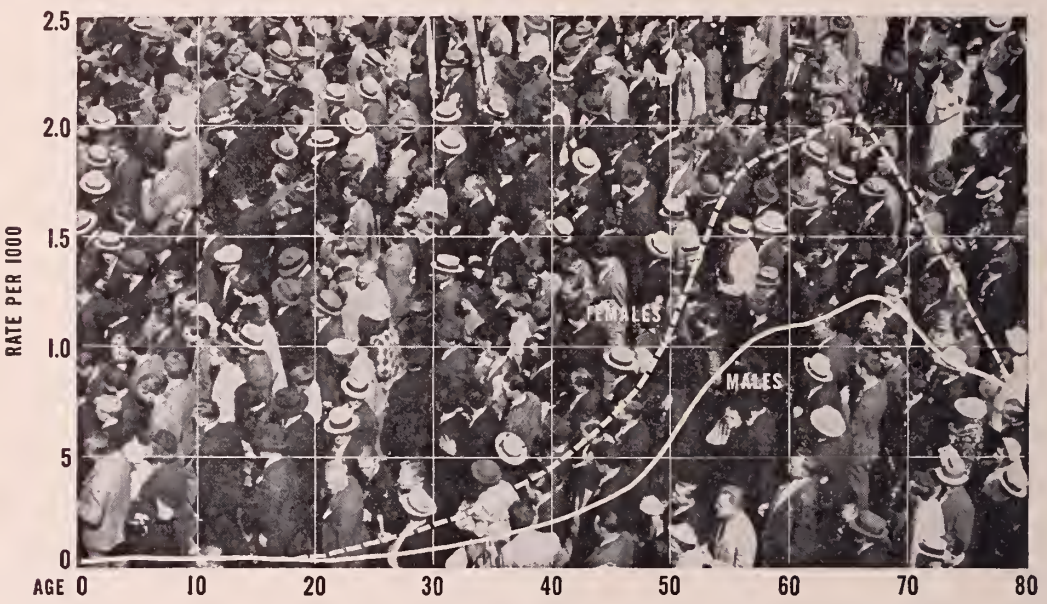
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1. Spiegelman, M., and Marks, H. H.: Am. J. Pub. Health 36:26 (Jan.) 1946. 2. Statistical Bull., Met. Life Ins. Co. 27:6 (Feb.) 1946.

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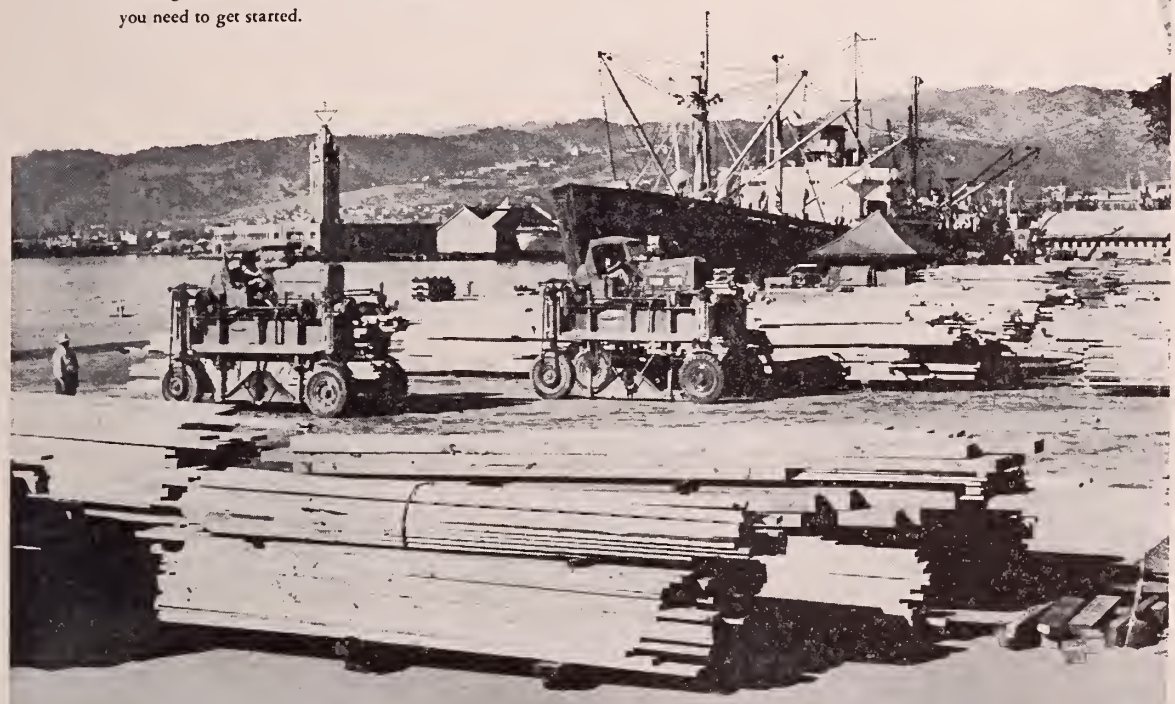
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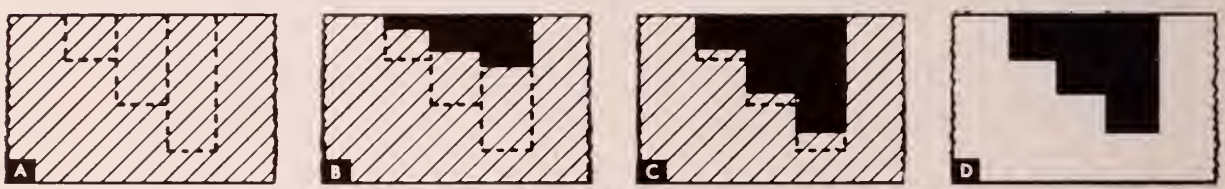
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SCHEMATIC DRAWINGS OF ACTION IN EMULSION DURING PROCESSING



(A) Lotent imoge. (B) Partial development. (C) Complete development. (D) Finished rodiagroph.

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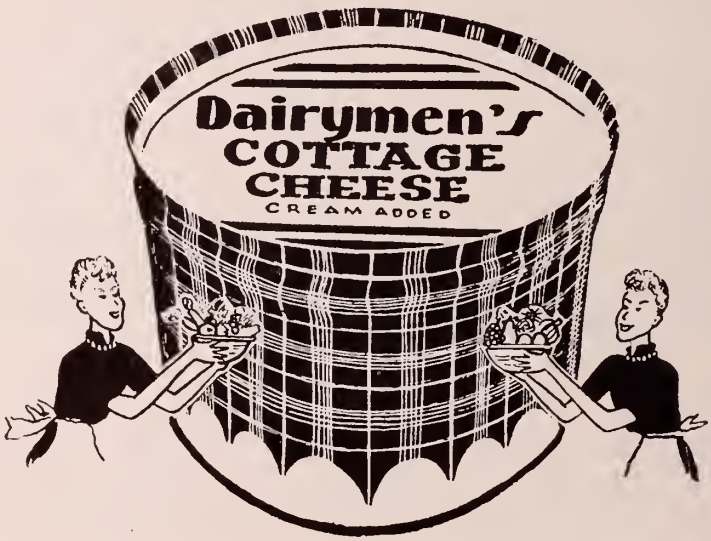
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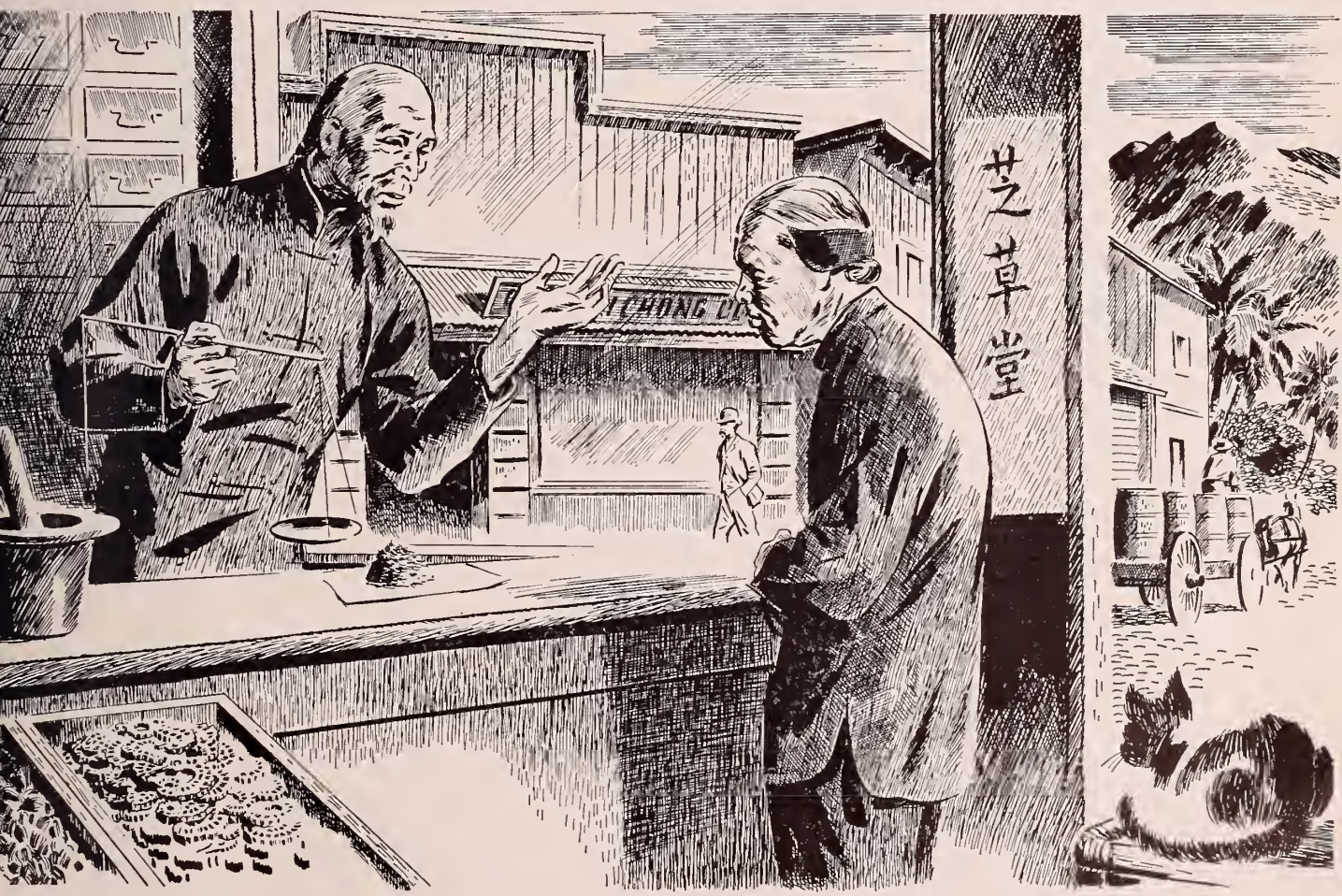
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In broad and simple terms, epilepsy is a disorder in which the patient suffers recurrent nervous seizures. These seizures—usually characterized by muscular convulsions and sometimes by the loss of consciousness—vary greatly in frequency, duration, and intensity.

The fundamental cause of epilepsy is unknown, although a variety of contributing causes have been established.

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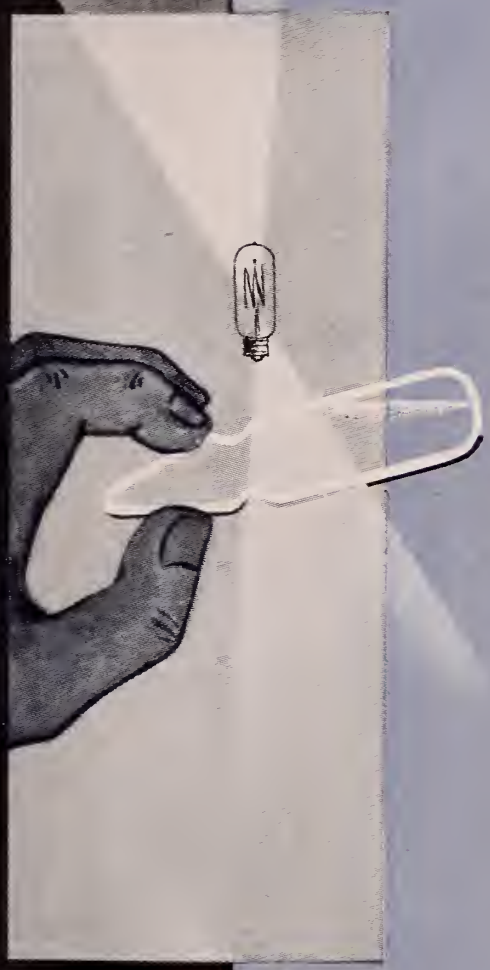
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ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

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for hospitals.



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